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A HISTORY OF THE SLEAFORD NAVIGATION

by

WILLIAM MICHAEL HUNT. B.Sc.(Econ.)

A thesis submitted to the Open University for the degree of Master of Philosophy and pertaining to the Arts (History) discipline.

1979.

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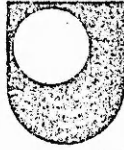
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This thesis, entitled 'A History of the Sleaford Navigation', was submitted by Mr Hunt for the degree of Bachelor of Philosophy in February 1979. On the examiners' recommendation, however, the University awarded Mr Hunt the degree of Master of Philosophy.

M.R. Sullivan
Higher Degrees Officer

MRS/AR

ABSTRACT

No detailed study of any part of the canal and navigation system of Lincolnshire has so far been undertaken and, using primary sources almost exclusively, this work is the first complete account of the origins and the development of one of these rural navigations and the effects it had upon the local communities.

The early history of south Lincolnshire's drainage is considered and its close relationship with the River Slea/Kyme Eau. The importance of these waterways to the towns of Boston and Lincoln is also discussed.

With the quickening of industrial and agricultural change in England during the second half of the 18th. century the waterway systems of the country were extended and attempts were made to make navigable the River Slea/Kyme Eau in order to become a part of this network. These attempts are here considered in detail, as is the opposition given to the various schemes by both individuals and corporate bodies. A number of surveys, reports, estimates and applications to Parliament for an Act were made and these and the Parliamentary proceedings are examined.

In support of a navigation the vital role played by Sir Joseph Banks, the President of the Royal Society, both in Parliament and in relation to Drainage and Navigation Commissioners and supporters of the scheme, is explained.

The trading patterns exemplified by the Navigation during the early decades of the 19th. century give insight into the economic climate both locally and nationally and the importance of water transport for freight to this district is fully demonstrated.

Competing forms of transport are examined, in particular the railway, which was established in direct opposition to the Sleaford Navigation.

Finally, the reasons for the decline and closure of the waterway are considered and the present-day efforts to re-open the river to vessels.

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PART ONE

THE SLEAFORD NAVIGATION IN ITS GEOGRAPHICAL
AND HISTORICAL SETTING.

Introduction.

Sleaford is a market town in south Lincolnshire catering for the needs of a predominantly rural population. It is equidistantly situated from Grantham (14 miles), Lincoln (15 miles), Boston (17 miles) and Bourne (18 miles). It lies at the junction of two land types, the Jurassic Lincolnshire Limestone escarpment of Lincoln Edge to the west and the low-lying, very fertile, peat and marine silt soils to the east. This position, where two soil types and, therefore, two areas of differing produce, meet, accounts for the town's regional importance both today and in the past.

It is also a natural route centre, being sited at a fording place across the River Slea and utilised as such by the Roman "King Street", a road which was not, however, as important as "Ermine Street" which runs parallel to it about 5 miles to the west.

Opening out on to the site of Sleaford is the Ancaster Gap, a glacial overflow channel, which provides an easy routeway westwards to Grantham and thence into the Midlands. An original settlement dating from Anglo-Saxon times has been proven at Sleaford and the river terraces which rise particularly markedly to the north provided a "dry point" on which shelters could be constructed.

The agricultural importance of the town at the end of the 17th. century, a short time before any Navigation was contemplated, was noted by Ogilby,

"Tis a large well built Town, on a River of the same Name, formerly defended by a Castle now Ruinous. It enjoys a considerable Market on Mondays for Corn, Cattel, etc."¹

¹ John Ogilby, "Traveller's Guide of the Roads of England and Wales", 1699, page 78.

On a map of the district accompanying this account, corn fields are indicated in the area between Sleaford and the hamlet of Holdingham.¹

A few years later this additional information was given,

"Within the town and the space of two miles below it, it" (the River Slea) "drives five Corn mills, two fulling mills and one paper mill, and then falls into the Witham."²

The River Slea rises at a height of about 240 feet (80 metres) on the north side of Willoughby Heath,³ about two miles south-west of Ancaster. It rises from the Lincolnshire Limestone and flows immediately on to old river sands and gravels. It flows north as far as Willoughby Hall and then turns west through Ancaster and Wilsford, passing as it does so on to alluvium and then back on to sands and gravels. About 1 mile west of Sleaford town it is joined by a rivulet coming from a spring known as "Bully Wells", or "Boiling Wells".⁴ The river then divides into two just before it enters the town from the west. Both streams flow through the town and come together again on the east side. Here again it divides, the northern course being that of the main river today, known as the "New River", or "Sleaford Mill Stream", and the southern being called the "Old River". From Boiling Wells to Evedon the river is again on alluvium and then runs on fen sands and gravels. Both courses, now on peat, skirt a lens of boulder clay, on which the site of Haverholme Priory now stands, and then again come together near Anwick. From here on the river is known as "Kyme Eau". It continues through South Kyme and enters the River

1. Ibid. page 211.


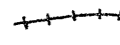


2 Herman Moll, "A new description of England and Wales, with the Adjacent Islands." 1724 (under "Sleaford" entry).

3 OS Sheet 130, 1:50,000, GR964427. Also Geological Survey (Prov. Ed), Sheet 127, Solid and Drift.

4 Ibid. GR045451.

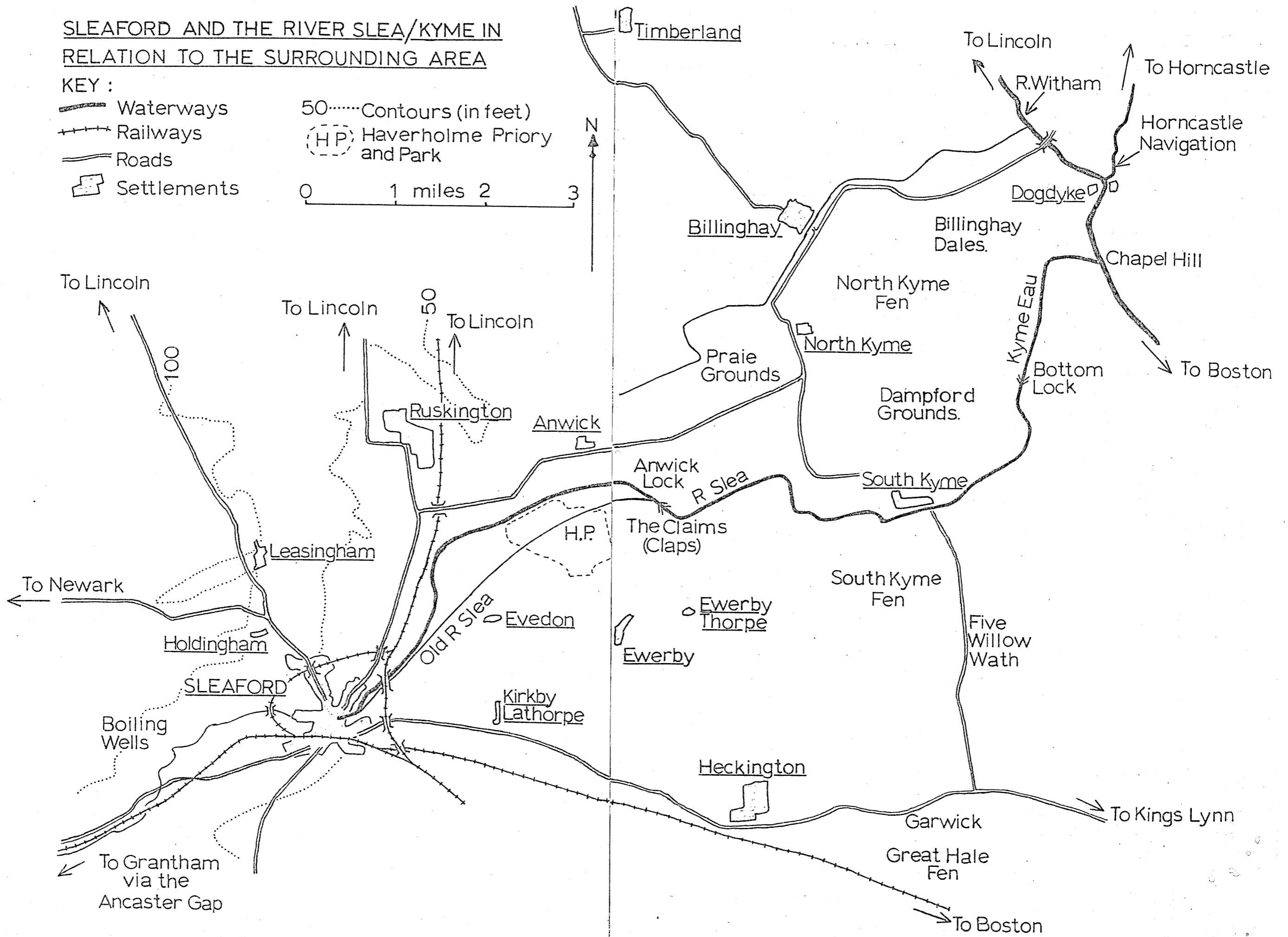
SLEAFORD AND THE RIVER SLEA/KYME IN RELATION TO THE SURROUNDING AREA

KEY :

-  Waterways
-  Railways
-  Roads
-  Settlements

50.....Contours (in feet)
 (H.P.) Haverholme Priory and Park

0 1 miles 2 3



Witham at Chapel Hill. From here there is direct access, by that river, to Boston and the sea to the south, and Lincoln and the Midlands and North of England to the north.

The total length of the river from Sleaford to its confluence with the Witham is approximately $13\frac{1}{2}$ miles.

Gilbert d'Umfraville's Concession.

The use of the river as a navigation is first indicated in an Act of Edward III (16.Ed.III. 1343). Kyme Eau¹ flowed through the lands of Gilbert d'Umfraville, Earl of Angus and lord of the Manor of Kyme, for a distance of about 6 miles and, in that year, he petitioned the king to be allowed to levy tolls on shipping in order to pay for improvements to the state of the river. The petition recorded that the river was so obstructed that ships carrying wool, wine and other general merchandise could not pass along it at any time of year, as they used to (thereby indicating the navigation function of the river existed before 1343). The Earl wanted to clean the river and raise the banks so that they would be exposed when the surrounding marshes were flooded and so indicate the position of the safe passage.

The king sent William Fraunk, his escheator for Lincolnshire, to investigate the claim and assess what detrimental effects the granting of the petition would have on the king's powers and authority, and that of others. William Fraunk apparently reported that the petition was legitimate and the King's Writ was granted.

¹ At that time known as the "Pittelbee", or "Pittelbeck", see Cottonian Vespasian E.xviii,f.5d., no.xiii. British Museum. Sir William Dugdale's "History of Imbanking and Drayning", 1772, page 196, calls the river, "Ee of Kyme".

For 34 years this concession was operated and was probably responsible for the straightening of the river between North and South Kyme and Dogdike. Then in 1377 a presentation, or plea, was made against the earl in the Court of King's Bench, objecting to his collection of tolls on goods in ships passing from Boston to Westeven. In examination the right of navigation was admitted and the plea failed.¹

Transport in the area in the 18th. century.

After this brief episode the records fall silent until the 18th. century. The "Revolution" in agricultural techniques of that century could not have failed to have an effect on the production of this area, particularly as this was combined with the growth in food demand from an increasing population in the industrial towns of the Midlands and North of England. The area immediately around Sleaford did not begin to increase production until the enclosures there in 1794 but other enclosures, e.g. that of Holland Fen in 1767, dramatically increased the output of areas along the course of the River Slea/Kyme Eau. To the north and west of Sleaford was the limestone escarpment which was predominantly heath land with soils which grade to loams and sands. Prior to 1794 this was a poor, open field region but, after that date, turnips, beans, clover, bonemanure and the seed drill were all successfully introduced into the smaller fields. Similar developments had occurred when the earlier enclosures had taken place in nearby areas. To the south and east were the peaty and clay districts given over to the grazing of cattle. Enclosure and the introduction of underdraining considerably improved the productivity here also.

¹ Plac. coram. Rege., term Trin. 50 Ed.111. Rot.15. Lincs.

The greatest disadvantage to trade was the extremely poor communications which then existed with other parts of England and also between the different areas within south Lincolnshire. The transportation of bulk goods was very difficult owing to the bad state of the roads (where they existed) and the problem of access to the city of Lincoln and the port of Boston due to the almost impassable nature of the intervening fen. If this area was to supply agricultural produce in large quantities to distant parts of Britain, some means needed to be found whereby these adverse conditions could be overcome. Road construction was out of the question until the very end of the century as the techniques of building on fenland were not fully known. Thus, the solution lay with a water route and the River Slea/Kyme Eau was the obvious choice. It would only need "improving" - a new cut would not be required - and so a Navigation rather than a Canal was necessary.

The state of the River Witham and Fosdike Canal.

In looking at the possible waterway trade routes from Sleaford it is necessary to briefly study the state of the two major waterways of the area which were to give access to the sea and to the interior of England, namely, the River Witham and the Fosdike Canal.¹

The Fosdike provided a link between Lincoln and the River Trent and is a canal first made by the Romans to serve as a continuation of Cardike², another channel which ran parallel with Ermine Street from the River Welland at Kate's Bridge to the west, past Sleaford, and finally met the Witham. After the Roman Occupation the Fosdike

1. Early history summarised in, "The Lease of the Fosdike Navigation for 999 years from 1741, etc" 1826. River Witham manuscripts no.24a, Boston Reference Library.

2 Thought now to be primarily a drainage channel with a navigation function of secondary importance.

became choked with sand and mud and remained in this state until 1121 when it was restored. This was a time when Lincoln was a prosperous city¹ and carried on an extensive trade with Europe by means of the Witham. The restoration also provided a general drain for the lands surrounding the city.

It is not known how long this situation lasted but, by 1336, it had again become unnavigable. In that year a commission was appointed under Adam de Lyberg, Geffery de Edenham, Thomas de Sibthorp and Nicholas Belowe, with instructions to clean it out. They did not accomplish very much and the waterway soon reverted to its former state.

Up to 1376 the expenses of the navigation seem to have been paid rateably by the proprietors of the adjoining lands who benefited from the drainage facilities provided but then an unsuccessful attempt was made to impose on them the cost of keeping the channel navigable for ever after. This was made in the form of a presentment to King's Bench. In this document is stated that boats came to Lincoln along the Fosdike from Nottingham, York and Kingston-upon-Hull. No action seems to have been taken on this presentment and the idea of imposing the upkeep on the landowners on either side was abandoned after that.

Two other commissions for improving the navigation followed and, for a short while, the canal was navigable but soon silted up again and became completely impassable.

Leland says that the next works on the Fosdike were at the beginning of the 16th. century and undertaken by Bishop Atwater of Lincoln but he died (1520) before they could be finished. From then until 1669 no

¹ William Camden, "Britannica", page 470 (David & Charles reprint of 1665 edition, 1971)

attempts were made to continue his works and Lincoln and the fens to the south were deprived of a link with the Trent for about 150 years.

The Fosdike connects with the sea by way of the River Witham.¹ For some time after the Norman Conquest the Witham was capable of carrying sea-going vessels and this was a major reason for Lincoln's wealth. The river was very much wider then than it is now and the tidal limit was Lincoln itself. Gradually, though, the estuary began to accumulate silt and this restricted the tidal flow. Consequently, the river became incapable of taking loaded vessels.²

The overseas trade of Lincoln is mentioned in Rhymer's "Foedera" where is recorded an order made during the reign of Henry III which allowed French merchant ships to enter Lincoln and other ports in safety even though, at that time, there was a general prohibition of French vessels.

One of the earliest descriptions of the Witham comes from Leland,

"The curse of Lindis River from Lincolne to Boston a 50 miles be water as the creekes go, and 24 miles from Lincolne to Boston to take way by fery.

There be no bridges on Lindis River from Lincolne to Boston, but thorn-brid, a little beneth high-bridge.

1 In the past also known as the "Aye" and the "Lindis River".

2 "That the Witham had formerly a broad channel capable of being navigated by ships of considerable size various writers affirm and as ... some proof ... a large anchor is said to have been found in a valley to the east of Lincoln ... and a boat ... dug up in the principal street, many yards higher than the present level of the river." River Witham manuscripts, no.24a.

"High-bridge hath by one great arch, and over a pece of it is a chapel of St. George.

Ther be four commune places named at fery's apou the water of Lindis, betwixt Lincolne and Boston, the which ferys lead to divers places."

It is not certain when the tide stopped flowing to Lincoln but it has been estimated to have occurred at about the end of the 12th. century. Although sea-going vessels could not reach the city the Witham was still navigable for small craft and the banks of the river were regularly maintained. Between about 1100 and 1135 many of the low-lying areas along the river were planted with trees and became forested and, in 1241, Haute Huntre Fen (Holland Fen) was divided into townships. These works could not have been done had not the Witham been affording a good drainage for the surrounding lands.

In 1325 the sea-banks overflowed and caused considerable damage in the Kesteven and Holland areas, aided by an insufficiency of drains and ditches. Various presentments were made to the Court of Sewers but as the Witham is not mentioned in any of these it can be assumed that it was then still free from obstruction.

However, by 1333 the river had become obstructed but these blockages were on that part of the river above Lincoln and so were not affecting the estuary area.¹ A similar situation occurred about 30 years later.²

From then until the beginning of the 16th. century various surveys and presentments of the river were made to control the flood tides. This culminated in a Council held at Boston in 1500 to consider the best means to be adopted for this purpose and for ensuring the speedy passage of the fresh water to the sea. It was determined that a sluice

¹ According to Dugdale.

² Ibid.

be immediately erected at Boston and it was agreed that the Flemish engineer, Mayhave Hake, should be employed to carry out the works. He brought with him from Flanders 14 masons and 4 labourers to construct the sluice and dam and all the building materials were imported from Calais. His fee was paid by the landowners on either side of the river who would benefit from the protection provided. When this project was finished it worked satisfactorily, controlling the tide entering the river and, at the same time, considerably improving the fen drainage.

So, by the early part of the 16th. century the Witham was in quite a good navigable condition - but it was then again allowed to decay. It silted-up and the banks fell into disrepair. Repeated floodings occurred over the whole length between Lincoln and Boston and also over the lowlands west of Lincoln due to the then imperfect state of the drainage of the Fosdike and the constant drainage of water from the higher areas of Lincoln Edge.

The state of the Witham and Fosdike now had a really bad effect on Lincoln's trade and the loss of the two navigations has been seen by some as a reason for this period being one of poverty and depopulation in the city.

It was during this depressed period that the Act of 1671 was obtained. In this the Mayor and Corporation of Lincoln were to make the Fosdike and Witham navigable again and, if they failed to do this within two years of the passing of the Act, anyone else could do it. Powers were given to collect tolls and raise money on mortgage for defraying the expenses of the works.

The city authorities undertook the work within the prescribed time but for the Fosdike only - the Witham was not touched. The work which was done on the Fosdike was poorly performed and the waterway quickly returned to the condition it was in before the Act. Mr. Sergeant Cullis, in his reading on the Statute of Sewers, refers to the Fosdike of this

time,

"This ditch is at this day a current and passage for boats of small burden in winter but in summer none at all though of late great sums of money have been expended thereupon... at the best it is the worst of all that country."¹

In 1740, the Mayor and Corporation of Lincoln, then holding two-thirds of the lease of the Fosdike (James Humberston of New Inn, Middx, held the lease on the other one-third) granted a lease² on this section for the tolls, dues, etc. to Richard Ellison³ of Thorne for 999 years from September 29th. 1741, at a yearly rent of £50. Ellison entered into covenants with the Corporation for improving and maintaining the navigation and undertook to make, at his own expense, any new locks, pens, wharves and warehouses as should be necessary and to deepen the Fosdike so as to enable boats drawing up to 3'6" to pass from the Trent to Lincoln. Humberston leased his one-third back to the Corporation for 99 years from September 29th. 1741⁴ at £25 per annum and this was immediately reassigned to Richard Ellison who so became the lessee for the whole of the Fosdike Canal.

He died in 1743 and his lease was taken over by his son, Richard Ellison II, who spent large sums improving the canal and the route was clear for vessels coming from the Midland counties to Lincoln by 1745.

In 1762 there was a complaint made by the landowners in the neighbourhood of the Fosdike that the water in it was being kept up too high and so preventing adequate land drainage. The engineers John Grundy and John Smeaton were employed to investigate ways of improving this drainage. From their survey it appeared that the complaints were

¹ The Fosdike's history during this period is fully covered in Sir Francis Hill's "Georgian Lincoln" C.U.P. 1966 pp.126-132.

² Dated September 18th. 1740.

³ A wool merchant, also part lessee of Don Navigation, 1737-43.

⁴ Lease dated August 1st. 1741.

justified. The gauge-bar at Torksey Lock was 1'3" above the staunch at Brayford Head (the two extreme ends of the canal) and planks were occasionally added to that staunch to bring the height to 2'1" above the staunch. Their report stated that the mean depth from the High Bridge to Till Bridge was 3' when the water level was held 6" above the staunch and 3'2" from Till Bridge to Drinsey-Mook. The width was given as 32' at the top and 24' at the bottom. Their plan proposed to widen the channel to 48' at the top and 24' at the bottom and to lower the water surface to 1'2" below the lowest ground level. They suggested that Swan Pool and Cockoo Pool be made into reservoirs. The estimated cost of the works was £6,200. However, apart from some small constructions no action was taken.

Boston in the 18th. century.

Throughout most of the 18th. century the port of Boston was in a depressed state, a position brought about directly by the poor condition of the Fossdike and Witham. The previous hinterland of the port, the Midlands, exported the bulk of its produce by way of the navigable Humber and Thames and this had been the situation since the 16th. century. The sluice constructed by Mayhave Hake in 1500 did not remain operative for long and the Haven, that is, the part of the River Witham from Boston to the sea, became silted-up through lack of natural scouring. Not only did this bring about a reduction in the trade in goods but it also meant that an important port industry, shipbuilding, declined. This reached such a low state that one, Daniel Rhodes, writing in 1666, stated that no ships had been constructed there during the previous twenty years.

At that time the coastal trade was of greater significance than foreign, although neither was very large. In 1612 only sixteen cargoes¹ of coal were carried by Boston ships, whereas the ports of Kings Lynn, Ipswich and Yarmouth were reported as having more than fifty colliers

¹ See note 2, p.13.

each. This trend was to continue. In 1683, 0.35% (1,858 tons) of the Newcastle coalfield's output came to Boston but even this compares favourably with the 0.12% brought in in 1730. Trade with the major market of London was equally bad - 15 cargoes out of 352 leaving London in 1628 were for Boston, while 1683 saw only 17 out of 1,001 destined for the town. The return traffic told the same story as, again for 1683, only 11 cargoes out of 4,131 which arrived in London came from Boston.

Boston's medieval successes had been based on the wool trade but, even here, absolute decline had set in as, for example, the figures for 1685/6 illustrate. Then, only 153 sacks of wool, representing half the town's total wool shipments were transmitted to London. The bulk of the outward-bound coastal trade during this period consisted of agricultural produce in the form of cereals such as wheat and barley (going in particular to Newcastle), peas, beans and wood.

Things continued thus into the 18th. century. Daniel Defoe visited the town and described it as,

"... a large, populous, and well-built town, full of good merchants, and has a good share of foreign trade."¹

In this he was wrong. He could almost have been writing about a completely different place. His reference to the entrance of the port, Boston Deep, is more accurate, though,

"... as difficult ... as most upon the whole eastern shore of Britain."

The situation was more accurately reflected by Nathaniel Kinderley in 1751, when he wrote,

¹ Defoe, "A Tour through the whole island of Great Britain", 1724.

"Though we beg Leave to observe, that the extreme Badness of Boston-Haven (which at present is abundantly worse than it was ever known to be, for whereas thirty years ago, a ship of 250 Tun will get up to Boston Town, now even a small Sloop of but 40 or 50 Tun, and which draws but six Feet Water, cannot sail to or from the Town but at Spring-tide) though it be in a great Degree owing to the Want of the River being secured out above, having sufficient Banking, and a straiter Course given it in some Places, yet it is not so much owing to this, as to the Badness of the Outfall, and it being Choaked up by high Sands raised below the Mouth of it."¹

The figures for total tonnage of coastal shipping at Boston for this period substantiate Kinderley's observations and repudiate Defoe's. In 1709 there were 1,010 tons registered, making Boston the 19th. port in England and Wales. By 1750, the time talked about by Kinderley, this had fallen to 765 tons and 31st. place, but this had been somewhat increased by 1751, the time Kinderley actually wrote the above, to 1,100 tons and 24th. place.²

Roads in the Sleaford area in the 18th. century.

In the middle of the 18th. century the only means of land transport available were the roads. An efficient road network in this region would have been an undoubted competitor for trade to any navigation and, therefore, it is necessary to look at the state of land carriage between Sleaford and the Witham with which any Sleaford Navigation would have to compete.

1 Nathaniel Kinderley, "The Ancient and Present State of the Navigation of the Towns of Lyn, Wisbeach, Spalding and Boston", 1751, page 86. Boston Reference Library.

2 Most of these figures from, "Boston as a Port" by Dr. J. T. Lewis and N. R. Wright. Proceedings of 7th. East Midlands Industrial Archaeology Conference, 1974.

According to Wheeler,¹ there is little information available about the state of the roads prior to fen reclamation and this, even today, is still the case. However, what information there is is sufficient for a general pattern to emerge.

The earliest roads in the area were Roman with Ermine Street, running northwards to Lincoln, being the most important. This road avoided Sleaford, passing instead through Ancaster, a few miles west of the town. This road followed the line of the escarpment of Lincoln Edge.

A second early road has been noted as running between Heckington and Gosberton and, while not of proven Roman origin is, nevertheless, thought to be quite early.

The first reference to roads east of Sleaford occurs in 1376 and is mentioned by Dugdale.² This is an indirect reference to a road as the statement concerns a crossing place on the river but it was probably located near to Kyme Eau's junction with the Witham at Chapel Hill.

This crossing point may have been utilised by the Roman road mentioned by Stukeley,

"At Sleaford I am inclined to think another road came from Bonovallum, or Horncastle, to the east of the River Bane, southwards by Lysyates and so cross the Witham at Chapel Hill; and the Cardyke somewhere about Kyme or else crossed the Witham at the Hermitage, so went to Swines-head north end, to Donington."³

The undrained nature of the fens led to them being avoided by the roads until the latter part of the 18th. century.

1 W.H.Wheeler, "The History of the Fens of South Lincolnshire." 1896.

2 Op. cit. p.228-9.

3 William Stukeley, "Itinerarium Gaulesum." 1724, p.43.

During the period of the early turnpikes the Lincolnshire roads were orientated towards the London and Yorkshire markets for farm produce. The first link to the north from Sleaford was that with Lincoln, to join up with the road turnpiked to Wragby in 1739, and to the south, that with Peterborough, both turnpiked in 1756 (29.Geo.11. cap.84 & 85).

This still left the fens east of Sleaford without an adequate road network. Some remedy was provided by the Holland Fen Enclosure Act of 1767 which established that any public roads made over that enclosed area should be 60' wide and also made allowance that a plot not exceeding 50 acres should be set aside at Amber Hill (on the Fen) for the extraction of gravel for the use of the Boston to Donington turnpike (31.Geo.11.cap.50).

The importance of gravel and the state of the roads is mentioned in writings about this area made at the end of the 18th. century. In his report on the possibilities of making a navigation between Sleaford and the Witham, James Creassy says,

"... a great Part of the Country lying between the Port of Boston and New Sleaford, consists of Fen and low Grounds, which afford no Materials fit for making Roads capable of sustaining Carriages loaded with heavy Articles."¹

The type of construction of those roads which did exist is also recorded,

"Fen roads were made from sand or silt digged from the subsoil of the adjacent fields; and this mode of repairing them occasions a heavy expense to the traveller."²

¹ James Creassy's Report, see later.

² Cragg 1/1 & 2/1. Lincolnshire Archives, Lincoln Castle.

The nature of the land at Chapel Hill is mentioned in greater detail elsewhere in this work but the road situation was described thus,

"What are called roads at Chapel Hill are, in winter, not passable and if it were not for the navigable rivers passing by the place, the inhabitants would be miserable."¹

A slightly better picture is given by Thomas Stone (1794),

"The (fen) roads are tolerably good in summer but, in winter, as the materials of which they are composed are very soft (being chiefly moory soil and filth), they are then very often indifferent."²

In his comments upon the remarks made by Arthur Young in his account of Lincolnshire,³ William Marshall⁴ said,

"It is rather extraordinary that any man travelling for three months in one county, for the avowed purpose of observing the existing state of the "Agriculture and internal improvement" should be in a manner unobservant of its roads."

This is certainly true for Young's account of Lincolnshire roads amounts to only 17 lines, the most significant of which, coming at the end, are,

"Take the County in general, they must be esteemed below par."

Thus, the road transport facilities east of Sleaford in the second

¹ Cragg, op.cit.

² Thos.Stone, "General View of the Agriculture of the County of Lincoln, etc." 1794, and also quoted in William Marshall, "The Review and Abstract of the County Reports of the Board of Agriculture, etc." Vol.3, 1818, page 37.

³ Arthur Young, "General View of the Agriculture of the County of Lincoln." 1799.

⁴ Op.cit. page 100.

half of the 18th. century appear to have been poor and certainly inadequate for the speedy and easy transportation of bulky goods. Except for the turnpike roads which were to be found on the fringes of this region, the fen roads were suitable only for the lightest loads and, even then, in need of constant attention. The problem of flooding was ever present and, from this, even the turnpikes were not immune.

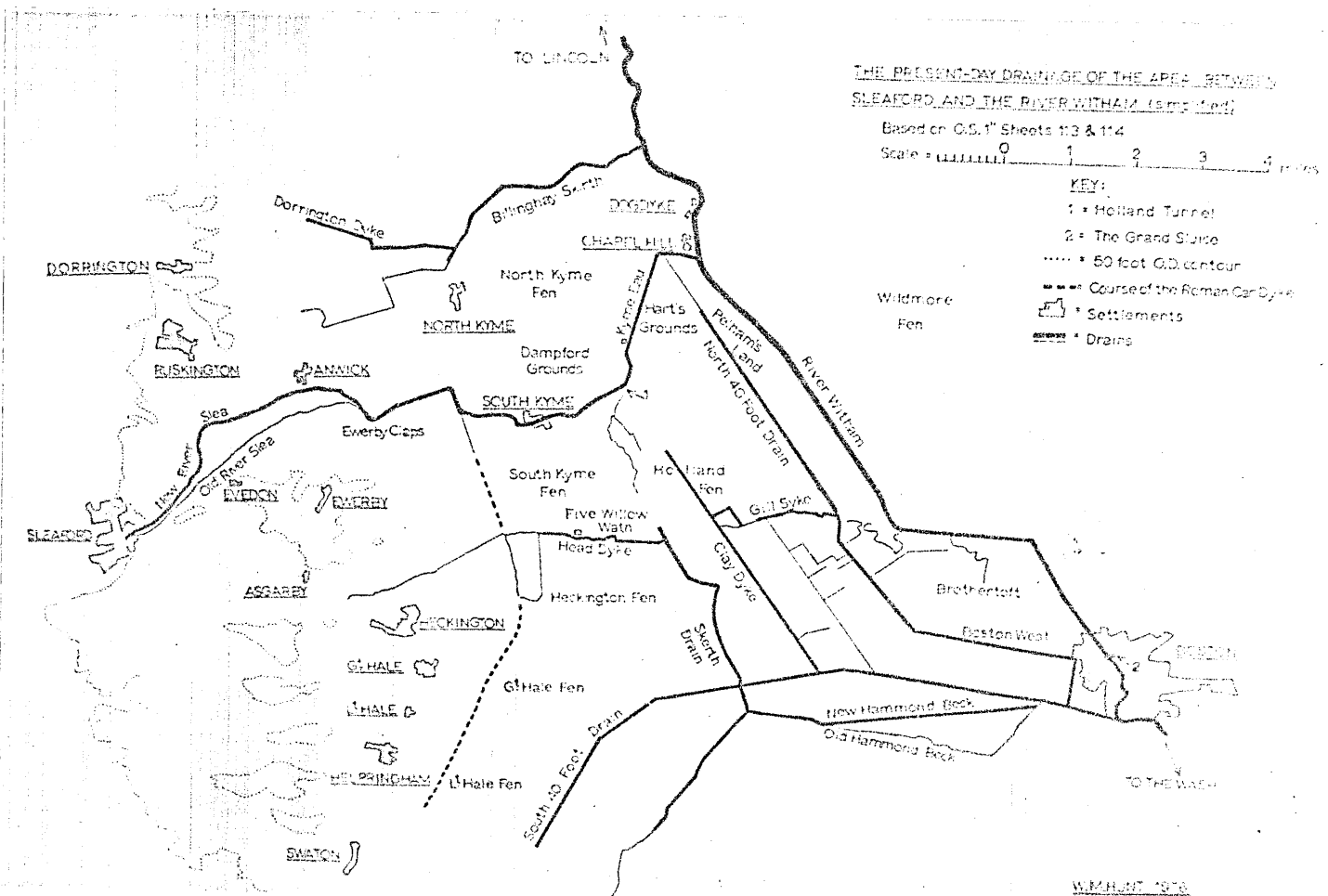
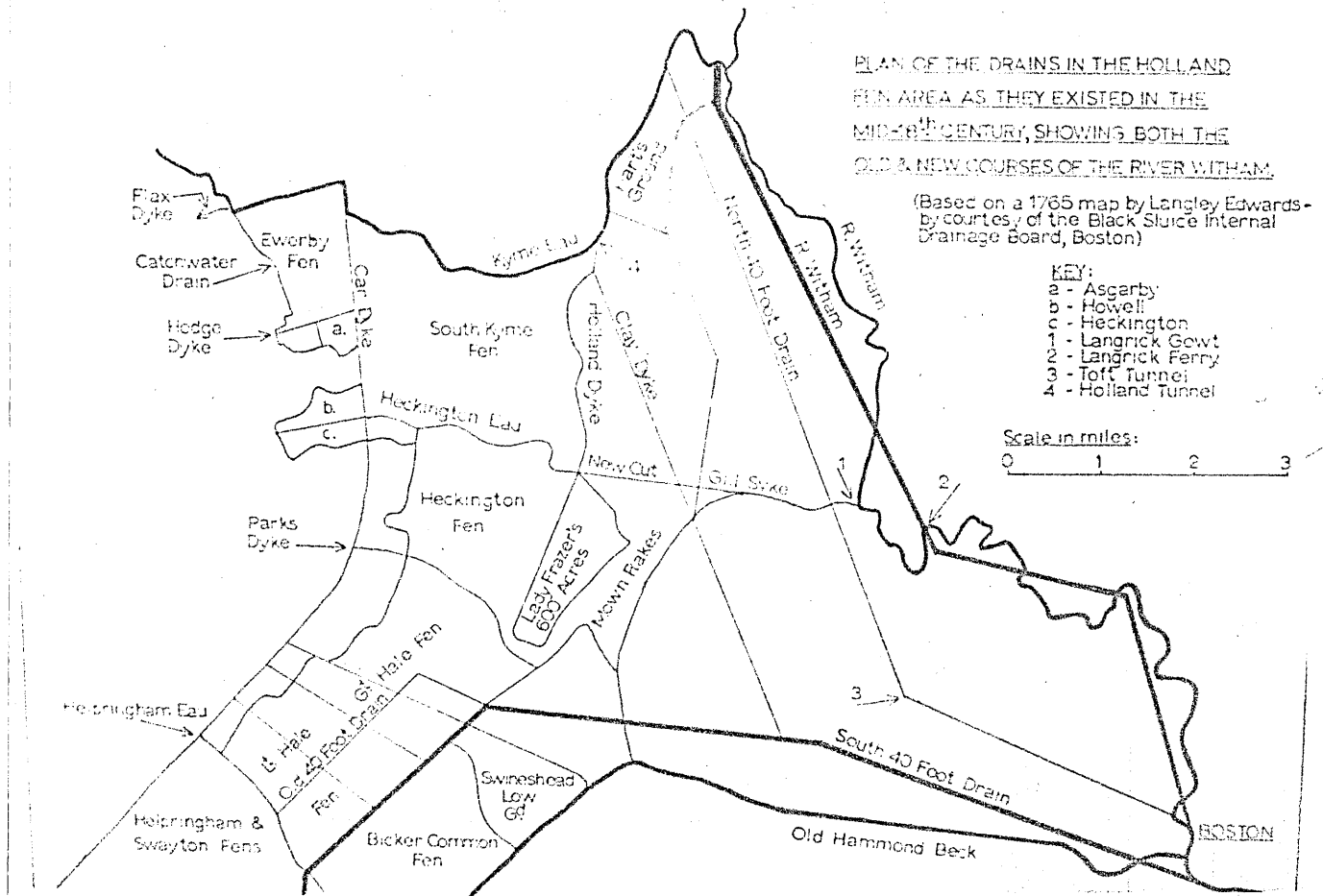
The River Witham, 1630 - 1766.

The early history of the Sleaford Navigation was a continual struggle to obtain an Act of Parliament to permit its construction. While Kyme Eau may have been seen as a means of transport by some, it formed an important link in the large system of drainage which then, as now, was vital to the security of the low-lying lands from the dangers of flood. The state of Kyme Eau in the 14th. century has already been indicated but no major drainage works were undertaken in the area until the beginning of the 18th. century. Lincolnshire had no Duke of Bedford to push through large-scale drainage schemes at the time he was forming the Bedford Levels, although the nobility were connected with the early drains and cuts in south Lincolnshire, though mainly to protect their own lands rather than to improve the region's drainage generally.

In 1630 the Earl of Lindsey made a cut along almost the present course of the South 40 Foot Drain but it was not particularly effective. The main reason for this was that the principal drainage channel of the area, the River Witham, was itself slow-flowing, meandering and liable to flood and so no permanent improvements to drainage could really occur until the Witham itself was improved.

The inefficiency of the Witham was the motive for an attempt in 1720 to drain the fens north of Kyme Eau by using the drain cut through Holland Fen and discharging at Boston. The promoter of the scheme was Lord ~~William~~ William and his cut was, and is, known as the North 40 Foot Drain.

Fig.2



He also made Lodericks (Langrick) Gowt sluice to discharge this drain at Boston, near the site of the present-day Grand Sluice. Today this drain enters the South 40 Foot on the south-west outskirts of Boston. Because of this and similar local schemes silting in the Witham became intense and the probability of flooding more certain year after year. The only solution appeared to be the cutting of a new channel and the construction of a major sluice at its outfall at Boston. These were provided for in the Witham Act of 1762.¹ The Grand Sluice at Boston, providing a clear waterway of 96', was opened in 1766.² At the same time as this was being built cuts were being made from the Grand Sluice to Anthony's Gowt (Anton's Gowt of today) to Langrick Ferry and Chapel Hill, where the Kyme Eau enters the Witham from the west. The distance between the two extreme points is about 10 miles and the cut was embanked on both sides.

The Witham Act in relation to Kyme Eau.

Some idea of the nature of the conditions prevailing along the Witham and Kyme Eau before these works were made can be gained from remarks made by a writer who lived in Kyme Fen in the mid-18th. century. He is reported to have summarised the conditions found then in

1 2.Geo.III.cap.32. The plan and estimate for the works were presented in a document dated, "Slonford, November 23rd.1761." The authors were John Grundy, Langley Edwards and John Smeaton. The estimates were -

i) for the drainage works only - £37,849.9.5d.

ii) for the navigation works only - £7,370.

See British Museum Library map. 710k.25(1).

2 For a description of the opening see, "Facts and Remarks relative to the Witham and Wolland, or, a series of observations on their present state, etc." by William Chapman, 1800, p.33. Witham Drainage documents, no.7. Boston Reference Library.

the following way.

"Near the Garwick milestone¹

Nothing there grew beneath the sky,

But willows scarcely six feet high

Or osiers barely three feet dry

And those of only one year's crop

The flood did fairly overtop."²

In more detail the flood conditions are then referred to and they way they affected the mode of life of the inhabitants of the region,

"I have times without number seen cows loosed out of their hovels and swim across a river with nothing but their faces and horns above water and then take footing at mid-rib deep or less and not one spot of dry land and then forage till weary and return to their hovels in the like swimming manner. No place whatever was more famous for this than Chapel Hill, which I have known for a long continuance of years (previous to cutting the new River Witham or, to speak more fully, opening the Grand Sluice.)"

The breeding and fattening of cattle must have been very difficult and barely profitable. The sheep would have been continually subject to foot-rot, with wool of a very low quality. In addition to these agricultural pursuits, haymaking, fishing and fowling would have been carried on.

1 Between Great Hale Fen and Heckington Fen.

2 By John Taylor (1580 - 1654), the "Water Poet".

See "Victoria County History of Lincolnshire", vol.2.1906. p.417. Also J.C.Clarke, "Farming in Lincolnshire" R.A.S. paper,1851.

The works carried out on the Witham after 1762 provided a marked improvement in drainage but failed entirely to prevent the flooding which proved to be a recurring problem into the 19th. century.¹ The new channel straightened, opened up and speeded the flow of water off the land by cutting through 14 major meanders. From Chapel Hill the works continued up to Lincoln, where it was completed in 1788, at a total cost of £60,450.

To meet this expense taxes were levied on the lands drained by the Witham and by tolls and duties taken on the navigation which was also provided. The control of drainage and navigation was under two sets of Commissioners, those for Witham Drainage and Witham Navigation.

Other drainage of the area.

The area lying between Holland Fen² and Helpringham had to find outfalls other than the Syke and Langrick Gowts and so, in 1765, an Act was passed which allowed for the cutting of the South 40 Foot (Black Sluice) Drain.

The South 40 Foot runs for approximately 21 miles northwards from Bourne Fen to the Witham. It is bounded on the west by the "highlands" (land over about 50 feet) and by the Old Hammond Beck on the east

1 "Of the last six seasons, four have been so wet that most of the new enclosed fens bordering on the Witham were inundated and the crop either lost or materially injured. Many hundred acres of the harvest of 1799 were reaped by men in boats." Wm. Chapman, "Observations on the improvement of Boston Haven", part 2, 1801, page 8. Boston Reference Library.

2 In the Holland Fen Enclosure Award of 1767 the parishes of this area are given as, Boston West, Skirbeck Quarter, Wyberton, Frampton, Kirton, Algarkirk, Fosdyke, Sutterton, Wigtoft, Swineshead and Brothertoft. Also known as the "11 towns of Holland".

and drains over 65,000 acres. The Hammond Beck is an older drainage channel, running nearly parallel with the South 40 Foot and discharges into that Drain on the east of Boston. This, with the Risegate Eau near Gosberton, took the waters from the upper parts of the western fen into Boston Haven. The northern portions of the district were drained by Heckington Eau and Gill Syke into the Witham at Langrick Sluice and by the Holland Dyke and the Skirth into Hammond Beck.

The South 40 Foot intersects at right angles the smaller drains and streams which come in from the west. The area furthest from the outfall of the Black Sluice is Bourne Fen which, with Dyke Fen, amounts to about 4,500 acres.

North of here the South 40 Foot drains the fens up to Hale Fen and, on the east, up to Bicker Fen and Swineshead.

Holland Fen is drained by the North 40 Foot Drain, Hammond Beck, Clay Dyke and several smaller drains, into the South 40 Foot. Before enclosure began here in 1767 this area, together with Heckington and Helpringham Fens, was under water for several weeks at a time between Boston and the western "highlands".

PART TWO

EARLY ATTEMPTS TO SECURE AN ACT OF PARLIAMENT :

1773-1784.

The James Creassy survey

a) The scheme

The first survey¹ for a proposed navigation on the River Slea/Kyme Eau was undertaken in the early 1770's by James Creassy² and published on March 12th, 1774. The map of the survey was prepared, however, during the previous November. Although nowhere stated, this survey was probably authorised by the Witham Drainage Commissioners as Creassy was a surveyor for them. In this report he explained the advantages of this type of waterway as they appeared at that time. First, "the many miles of fruitful land", as his report put it, surrounding Sleaford, would be put in contact with Lincoln and the port of Boston via the Witham. Second, coal could be carried to Sleaford cheaply and quickly, as well as a vast quantity of other merchandise, particularly that of a heavy and bulky nature which was at a particular disadvantage due to the poor state of land transport then. Indeed, the land route between Sleaford and Boston was so dangerous at times that guides made a living taking travellers across the intervening fen.³ A further advantage of this undertaking would be seen as the land between Sleaford and the south-west of Anwick Fen would be drained and the fear of flooding lessened if the river was deepened from Anwick Fen to Dampford Engine, by way of Ewerby Claps and South Kyme, and the earth from it raised into embankments on either side. Only the year before

1 "The Report of James Creassy, respecting the advantages, facilities and expense of opening a navigable communication from the town of Sleaford in the County of Lincoln to the present Navigation of the River Witham, from whence there is a Navigation to the port of Boston and the city of Lincoln and also along the Fosdike into the River Trent. P.S.J. 9/6. Lincoln Archives.

2 For details of this surveyor's career, see Appendix A.

3 Grigg, "The Agricultural Revolution in South Lincolnshire." C.U.P., 1966, page 43.

this area had been flooded in seven places by the river overflowing its banks.

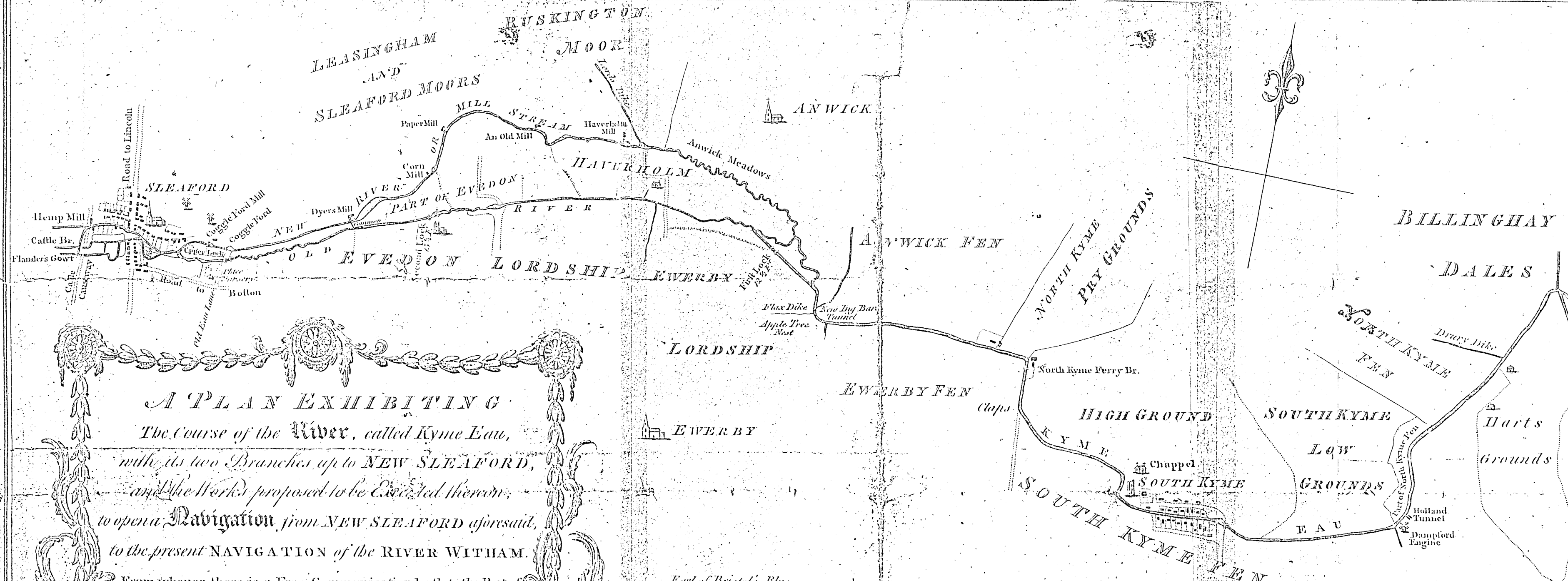
The scheme designed by Creassy involved the improvement of the Sleaford Old River and Kyme Eau (see plan). From Dampford Engine to Flax Dyke the Kyme Eau was to be dug out to a width of 15 feet at the bottom and the material removed formed into retaining banks on either side. Between Sleaford and Flax Dike the Kyme Eau and the Old and New Rivers meandered in rapidly succeeding loops and Creassy planned to avoid this obstruction by building a cut south of this section running from Kyme Eau to the Old River, joining it about 100 yards west of its confluence with the New River, or Mill Stream.

The Old River was then to be deepened, widened, straightened and embanked all the way to Sleaford. In the "cut" section was to be built the First Lock, which was to account for a rise of $12\frac{1}{2}$ feet, while a Second Lock, with a rise of $15\frac{1}{2}$ feet, was to be constructed immediately north of Evedon Church and just above the Evedon ford. The Third, or "Upper" Lock, with a rise of 17 feet, was also to be in this section, at a point where "Old Eau Lane" reached the river.

As it was intended to increase the amount of water passing along the Old River to provide for the navigation of vessels on it, the part of the river above the First Lock would have to be deepened. This was recommended as far as the bridges in Sleaford itself. The head of water here had to be sufficient not only to keep the Old River deep enough for barges but also to allow the mills on the Mill Stream to continue operating, even in dry seasons. Therefore, the recommendation was that this upper section was to be deepened sufficiently always to allow 3 feet of water to remain there, even when all the mills were operating.

It would be necessary at times to hold water above the surface of the land at some points between Sleaford and the Lower Lock and so Creassy recommended the construction of soke-dikes, or by-pass channels to discharge this water below the lock.

The locks themselves were each to have an out-to-out length of



*A PLAN EXHIBITING
The Course of the River, called Kyme Eau,
with its two Branches up to NEW SLEAFORD,
and the Works proposed to be Erected thereon,
to open a Navigation from NEW SLEAFORD aforesaid,
to the present NAVIGATION of the RIVER WITHAM.*

From whence there is a Free Communication both to the Port of
BOSTON and CITY of LINCOLN,
and also thro the Foddyke into the River Trent.

Surveyed in Nov: 1773.
By **JAMES CREASSY.**

- Earl of Bristol's Blue.*
- Lord Robt. Spencers Yellow.*
- Sir Sam: Gordon's Red.*
- Earl Fitz Williams's Green.*
- Sir Abraham Ham's Orange.*

A SCALE of 100 CHAINS.
0 10 20 30 40 50 60 70 80 90 100

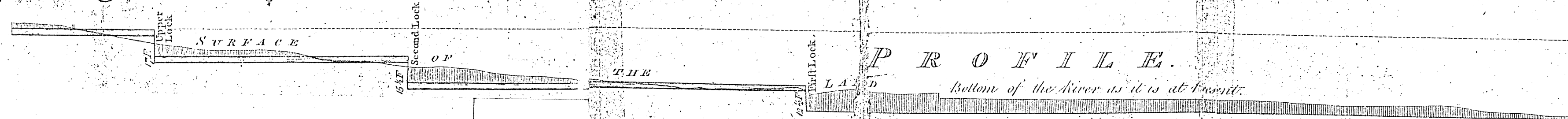


Fig.3

The James Creassy survey plan for a
Sleaford Navigation, November, 1773.

The following is a copy of the survey plan for a navigation on the Sleaford River, as surveyed by James Creassy in November, 1773. The plan shows the course of the river from its source at Sleaford to its mouth at the Trent, and includes a detailed description of the various works and improvements proposed for the navigation. The plan is divided into several sections, each describing a different part of the river and the works to be carried out there. The works include the construction of locks, weirs, and bridges, and the improvement of the banks and channels of the river. The plan also includes a list of the names of the various works and improvements, and a description of the materials and labor required for their construction. The plan is a valuable historical document, and provides a detailed account of the early stages of the Sleaford Navigation project.

88 feet with a distance of 58 feet between the doors and each lock was to have a keeper's house built nearby. It was envisaged that the waterway would be capable of carrying vessels of about 20 tons.

With the construction of the navigation the existing fords across the river would be deepened and become impassable and it was, therefore, proposed to build seven public waggon bridges, two at South Kyme, one at Nun's Causeway (on the south side of Haverholme Park), two at Evedon, one at "Bates" (a point where today's Garre Street in Sleaford crosses the river) and one at Old Eau Lane near the Upper Lock. Creassy put an estimate of £5,923.7.10d. on the works.

b) Parliamentary action, February - April, 1774.

Even before the survey had been published a petition was introduced into the House of Commons¹ for leave to bring in a Bill to make the navigation. This petition was referred to a Committee under the direction of Lord Brownlow Bertie² and Lord Robert Bertie.³

The Committee reported back on March 25th, 1774.⁴ Amongst those who had been examined was James Creassy and he had confirmed his estimate of constructional expense at about £6,000 for a waterway capable of carrying vessels of 20 tons burden. He had also been asked about the effects of the works on the lands on either side and had answered that all these proposals he had put forward would add to the security of this land. As to any possible damage to the mills, he presumed that there would be none for they were "not to be meddled with in any way" and, anyway, only waste water would be taken for the navigation. He further

1 On February 28th, 1774. House of Commons Journal, vol 34, page 507.

House of Lords Record Office (HLRO)

2 M.P. for Lincoln County. Attained to the Ancaster dukedom in 1779.

3 M.P. for Boston.

4 Op.cit. page 597.

estimated that the possible toll revenues could amount to £500 a year if a charge of 1/- per ton was levied.

After hearing the Committee's report the Commons gave leave for the introduction of a Bill, to be proposed and brought in by Lord Brownlow Bertie, Sir Cecil Wray and Mr. Amcotts.

This Bill was presented to the Commons by Lord Brownlow Bertie on April 15th. 1774¹ and given its First Reading. It was resolved that it should be read a second time.

At this point the record stops. The Bill was not read a second time and the House of Commons Index on Navigation Bills simply records that the Bill was discontinued.

c) Reasons for the Bill's withdrawal.

Why was this withdrawal made? As there are no extant records only conjecture will suffice. It is unlikely that it would have been anything to do with the link with the Witham and access to Boston or Lincoln. The state of the Witham at that time was certainly not ideal for barge traffic and improvements were made some decades later but the Witham Navigation was operating and recently (1766) the Grand Sluice had been completed to provide clearer water for the passage of sea-going vessels into Boston Haven and the port was reviving after some centuries of decline. Opposition from landowners in the surrounding area can also probably be ruled out as no petitions against the proposals are anywhere mentioned in the Witham Drainage or Navigation Minutes or are indicated as being presented to Parliament.

On the financial side, Croassy had estimated about £6,000 to complete the works and the Bill may have been presented in the hope that this would be forthcoming in the form of share subscriptions in the undertaking.² Canals were still a relatively new means of transport and the

¹ Op.cit. page 647

² A further factor may have been that the period 1772-7 was one of cheap money and speculation could have been expected

long-term advantages from an area such as Sleaford may not have been appreciated by investors, particularly as the Witham Navigation had not cleared its debts of construction, which had begun in 1762. Indeed, even by 1780 it was still not out of debt. It was possibly realised that money was not going to be forthcoming from the public and the Bill withdrawn accordingly.

Alternatively, it may have been realised that the engineering involved in the suggested plan would be too difficult. The rises mentioned for the locks, of $12\frac{1}{2}$, 15 and $17\frac{1}{2}$ feet, would have been the greatest in Britain at that time or, in fact, until the construction of the Manchester Ship Canal.

A further possibility may have been that the whole scheme was just a test of public opinion. Although no opposition was recorded as being presented, it may have been there or, and perhaps more significant, no great support was registered, either from landowners or merchants. An apathetic response may have indicated that the time was not yet right for a navigation.

Renewed Proposals, July, 1774 - December, 1782.

This attempt to make a navigation has a tantalising conclusion. The Bill was withdrawn in April but the Witham Drainage Commissioners' Minutes for July 5th, 1774¹ state that James Creassy, together with William Jessop, attended their meeting that day, with reports, levels and plans made by them for constructing a canal from Sleaford to the Witham. Apart from this statement no further mention is made of this in the Minutes. This raises two possibilities. Were the surveys, etc. those made for the withdrawn Bill and, if so, why were they being

¹ Lincoln Archives

produced now? If William Jessop¹ had helped produce them, why does his name not appear on the published survey or plan along with James Creasay's? Secondly, if this was a different survey, why was it made so soon after the withdrawal? Perhaps Jessop, always very careful in the techniques of construction employed by him, realised that the rises of the locks were impractical. How and why Jessop appeared on the scene, obtained this one mention in the Minutes and then disappeared again completely, is unknown. Whatever the answers are to these questions, the project was not pursued. No Bill was introduced into Parliament.

There the matter rested for a number of years at least, or so it seems, as far as the Drainage Commissioners were concerned. The only indication of an interest still being taken occurs in some handwritten expense claims² to Francis Thirkill, jar., the clerk to the Witham Navigation Commissioners. So, the Navigation Commissioners took over the interest previously held by the Drainage Commissioners. It is not stated from whom these bills were received but one covers the period from July 7th.1778 (when "Attendance at Annual Meeting at Sleaford, two days", was claimed) to June 17th.1779, when a year's salary of five guineas was demanded. The term "Annual Meeting" is interesting for it cannot refer to those held by either the Witham Drainage or Navigation Commissioners as these were at Boston. Does it mean that supporters of the scheme within Sleaford itself were meeting regularly with a view to keeping the idea alive? Local support would be vital for success.

¹ Later to become an extremely important canal engineer and to have another connection with a canal to Sleaford. In 1774 he had just become his own master after being a pupil of John Smeaton.

² P.S.J. 9/6 and LRA 1/52. Lincoln Archives.

A similar bill exists, covering items from July 6th.1779 until February 28th.1781 and, again, it is for attendance at the Annual Meeting at Sleaford, but is endorsed, "Dr. Navigation Bill." This means that either a subscription existed for paying expenses relating to a new navigation or that this bill was to be paid from a fund for promoting a Parliamentary Bill for obtaining the waterway. This second possibility is given extra weight when, on August 9th.1781, an advertisement appeared in the "Lincolnshire, Rutland and Stamford Mercury", the local newspaper of the area, calling a meeting on the 30th. of that month, "... to consider the making of a Navigation from the town of Sleaford to the River Witham at Chapel Hill."

No minuted or documentary evidence relating to this meeting is known and things did not proceed much beyond this point. It is known, however, that the engineer, John Varley, was instructed to prepare a report of the intended waterway and this was presented.¹ It was intended that an application to Parliament to bring in the Bill would be made and success was anticipated. A number of local landowners were in favour of the navigation and determined to use their influence at Westminster. This is seen in an unsigned and undated note, which stated,

"(Sir Joseph) Banks, who should have despatched the letters to the members relative to the Kyme Bill on Friday the 15th. of February, in which case they would have been received on (illegible), did not send them until Monday, so they were not received until Monday the 20th. and by that means I have been able to resist the Second Reading of the Bill (illegible)

¹ As evidenced by a reference to it in the report of a meeting held on December 17th.1782. P.S.J. 9/6 and LRA 1/52. Lincoln Archives. For some details of Varley's career, see Appendix A.

"Monday the 18th., when it ought to have been read to the
deputation of Lord Fitzwilliam."¹

This is a very interesting document. It shows that Sir Joseph Banks², the eminent botanist and landowner of Revesby, near Boston, was taking an active part in promoting the scheme and Lord Fitzwilliam, together with Frederick, Earl of Bristol (who was also Bishop of Londonderry) are known to have been in support also. Of greater importance, though, is the mention of dates and of a Second Reading of a Bill. But, first, the date.

The document is undated but the dates mentioned, Friday, February 15th; Monday the 18th., and Wednesday the 20th., only fell so in the years 1782 and 1788, if a period from 1774 until 1792 is looked at. There is no evidence that there was any activity for a Sleaford Navigation which reached the stage of a Parliamentary application for a Bill in the late 1780's and so it seems likely that this note relates to early 1782 and, therefore, connected with the attempt to promote the scheme mentioned in the newspaper of August 9th. 1781.

Having established the approximate date, the wording of the note can be considered, a wording which was anticipatory. Perhaps it was planned that Parliamentary activity would be begun in February, 1782 and a timetable was drawn up accordingly but, on a consideration of the Journals of the Houses of Commons and Lords, there are no Readings of

1 Spalding Gentlemen's Society, Banks/Stanhope Papers, File 14,
Section 8 (SGS BS 14/8).

2 Sir Joseph Banks (Feb. 2nd. 1743. O.S. - June 19th. 1820), Baronet, C.B., President of the Royal Society, 1778-1820. As a naturalist he was one of the most eminent men of his time. A friend and adviser to King George III. He took an intense interest in promoting and encouraging works in Lincolnshire which he conceived were for the public good.

the Bill recorded at all, in fact, there was no petition presented for a Bill either.

Once again, the reason for what must have been a sudden decision not to proceed was not recorded. However, whatever the reason, it was something which was thought could be swiftly overcome as a revival in activity took place at the end of that year.

The second Varley report (December, 1782 - February, 1783)

On December 17th, 1782, a meeting took place at the George Inn at Sleaford. Those attending included titled landowners, Sir Christopher Whichcote, Bart, of Aswarby, Sir Jenison William Gordon, of Haverholme Park, or their agents, such as Edward Hare, the engineer, acting on behalf of the Earl of Bristol. Local gentlemen, traders, farmers, clergy and the M.P. for Boston were also there.

The meeting agreed that a navigation from Sleaford Castle Causeway (a road on the western side of the town) to the Witham would be a great public utility and instructed John Varley to prepare another plan and estimate for its construction, paying particular attention to the security of the estates of the landowners along the riverside.

Benjamin Handley¹ was appointed solicitor to the group and acted as Clerk. He was asked to prepare a list of owners and occupiers of the lands adjoining the intended route in order to settle any problems or objections which the landowners might have, before a petition for a Bill was made to Parliament. He was further instructed to prepare draft headings for the various sections of the proposed Bill.

¹ (1755 - April 23rd, 1828). Son of a three-times Mayor of Newark. He moved to Sleaford sometime about 1780 and built-up a flourishing solicitor's firm. He became co-founder, with Anthony Peacock of South Kyme and William Kirton of Sleaford, of the "Peacock, Handley and Kirton and Co." bank, which was to have such a large part to play in the history of this navigation.

This meeting was then adjourned until January 16th. 1783, at the Angel Inn at Sleaford.

There is no existing record taken during this next meeting but the Minutes of the Witham Drainage Commissioners for January 23rd. and those of the Witham Navigation Commissioners for January 30th. 1783 refer to it.

The Drainage Commissioners met at Boston Town Hall¹ and mentioned that the Sleaford meeting of the 16th. had taken into consideration the proposed navigation and Varley's plan, report and estimate. To protect what they saw as their interests, the Drainage Commissioners wanted to make clear the position as to their rights and powers, as they saw them, over Kyme Eau - rights and powers which they were determined to protect.

They argued that as the Witham Act gave them drainage powers over Kyme Eau from the Witham to the "High Grounds" in Ewerby, they would be unable to give their support to any scheme which interfered with them and, therefore, they expected all works carried out between those two places to be under their inspection and control. To protect the surrounding area from flood, all proposed alterations to the banks from the Witham to Ewerby should leave them as high and as wide as they then were and those from Ewerby to Flax Dyke should be strengthened to make them suitable for haling. The Commissioners also demanded the retention of their control over drainage tunnels, allowing no alteration in either their number or dimensions except under their direction and agreement. Repositioning of tunnels, particularly laying them lower, was to be done only as they thought correct and under their inspection. Further, as they thought that

¹ Undated report of the meeting. SGS IS 14/8.

Chapel Hill Bridge might need altering if it was to allow barge traffic to pass under it, any such alterations were to be paid for by the Navigation.

A further, and more immediately important, point raised at the meeting of the 16th. was for a reduction in the tolls which would be charged on goods in vessels sailing to and from Sleaford to Lincoln and Boston. This proposal does not seem to have been received too well by the Commissioners for the Witham Navigation who recorded that,

"[a reduction of tolls] would open a door to many frauds and abuses and be injurious to the Proprietors of the Trust raised in the credit of this Act. Therefore, the Commissioners cannot give their consent."¹

They did, however, leave their options open for they decided that when a Sleaford Navigation had been built they would be willing to make any alterations in their toll rates which would be of benefit to the new waterway but which would not lead to losses by the Witham.

A reduction of the Witham toll, which then stood at 1/6d. a ton, was seen by the supporters of the Sleaford Navigation as critical to the viability of the enterprise.

Two days later, on February 1st. John Varley's second report and estimate were presented to a meeting of the supporters at the "George Inn", Sleaford.²

¹ Witham Navigation Minutes, January 30th. 1783, Lincoln Archives.

² "The report for making navigable a certain stream or river and the branches thereof from Sleaford... to the River Witham near Chapel Hill." Undated. SGS BS 14/8.

The Survey of John Varley

The report began by stating that the river would be scoured, widened and deepened to a level with the bed of the Witham to within 5 or 6 chains (330-396 yards) of a house at Terry Booth where it was intended to erect a lock with a 3'9" rise. From here to Sleaford it was intended to construct six locks to account for a rise of 40'1" in the river. The first of these was to be in a cut to be made through the land of Sir Jenison Gordon, the owner of Haverholme Priory and Park, about 1,180 yards above Flax Dyke, at which place the river would be deepened to 7 feet. The next was to be at Nun's Causeway, or within 660 yards of it and the third at a piece of land belonging to a Mrs. Nesbitt in Evedon lordship in the occupation of a William Bailey. The fourth was also to be adjoining Mrs. Nesbitt's land, in this case at the eastern corner of a plot occupied by a Joseph Greenfield. The final two locks were to be in new cuts, the first through common land (known as "The Holmes") next to the Dyer's Mill and the final one at the side of Cogglesford Mill near Sleaford.

Flood gates and a weir were to be erected at the first lock and weirs at each of the others. Each lock was to be 58' within the doors and to have a 14' clear waterway. Two watch-houses were to be built, one at the first lock and the other at the lock at Flax Dyke.

All the existing tunnels through the banks for watering the surrounding land were to be taken up and shuttles and tunnels of the same capacity or of the capacity required by the Witham Act were to be put down instead. However, the bottoms of all the new tunnels were to be not more than 6" lower than the top of the weir which was respectively above each of them.

As the water was to be held above the level of the land in several places between Evedon and Sleaford it was proposed to construct soke dikes, to strengthen the banks of the river for security and, in general, to drain more efficiently the surrounding country.

Fords which then existed would become useless by the raising of the water level and bridges were to be made in place of them. The bridge-building contemplated consisted of a new structure at the ford leading from South Kyme to Five Willow Wath, another arch to be added to the existing bridge at South Kyme and bridges at the fords at Kyme Tower, North Kyme Ferry, at that leading from Haverholme to Everby, from Sleaford and Leasingham to Evedon, from Goodacre's corn mill to Evedon church and from Sleaford Common to Old Eau Lane. The bridges at Bate's Fen in Sleaford and the south bridge in that town were to be rebuilt. All the work was to be done so that at all times there should be a depth of water in the navigation of 3' up to the Dyer's Mill and 5' in the remaining section.

As the navigation through Sleaford itself would be confined to a narrow space between buildings and as the land was of high value, it was considered more advisable to erect stone walls than to purchase the land and buildings along that part of the course.

Although the report was to make navigable the river as far as Sleaford Castle Causeway it recommended that the towing path should extend no further than Bate's Fen, which was on the eastern side of the town - the Castle Causeway being on the west.

The total length of the intended navigation was 12 miles 3 furlongs and 8 poles, with a fall of 43'10". The estimated cost for the completion of the works was £7,606.18.2d.

Witham toll reductions.

This meeting to consider John Varley's report also examined the statement made by the Witham Navigation Commissioners at their meeting of January 30th. Their reluctance to lower the toll rate was an obvious cause for concern and one that had to be settled before an application could be made to Parliament for a Bill. With this in mind the meeting reported that it considered it expedient to postpone the proposed application to Parliament until the plan of the navigation

had been settled with the Commissioners and the owners and occupiers of lands adjoining the river.¹

The question of toll reduction must have been seen in the following few months as the one on which the whole feasibility of the project depended. Much discussion and careful consideration probably took place before the next recorded meeting of the supporters at the "Angel" in Sleaford on July 1st.

The reply they then made to the Witham Commissioners was that if the Witham tolls were not reduced to 9d. a ton on goods sailing on the Witham and destined for, or originating at, Sleaford, then the whole idea of a Sleaford Navigation would have to be abandoned and a preference given to establishing an efficient land carriage instead.²

So, the economics of the time made it imperative that the Witham toll be reduced if the proposed navigation was not to price itself out of the market before it was even established. The advantages of water transport for bulk goods, compared with land carriage, would only remain such as long as the rates charged were acceptable. The lower toll would attract custom from the roads (which were in the process of being turnpiked) and would also increase the total amount of toll received by the Witham Navigation. This was the point which the Sleaford group pressed and which was taken by the Commissioners.

At a meeting at Boston Town Hall on July 30th. 1783. they agreed that the toll of 1/6d. a ton then laid on Witham goods would be destructive to such a scheme unless it could be reduced to 9d. They also agreed that such a navigation would greatly increase the tolls received by the Witham. They stated that they were in favour of a

¹ A printed report, signed by Benjamin Handley, "Resolutions of the Sleaford Navigation Meeting, February 1st. 1783." SGS BS 14/8

² PSJ 9/6. Lincoln Archives.

9d. a ton toll as it would seem to be beneficial to them and they would not oppose any clause of that kind being put into any intended Bill, provided that the consent of the Witham Navigation proprietors could be obtained.

At this point the records become somewhat confusing. The above statement by the Commissioners demonstrates a favourable attitude towards a Sleaford Navigation. Yet, nothing had been finalised by the end of the year.

The Sleaford group met at the "White Hart Hotel" in Boston on November 6th., when it was suggested increasing the Witham toll to 2/- on Sleaford goods, with the Witham taking 9d. and the Sleaford the remaining 1/3d. They were possibly worried about underestimating the costs of operating the new navigation. It was probably also resolved at this meeting that Benjamin Handley should write to the Commissioners in response to a problem which had arisen and which was most likely responsible for the delay in any decisions being taken. It would seem that the Commissioners had reversed their decision to allow a toll reduction, for Handley wrote,

"... that if the Commissioners will not consent to reduce their toll to 9d. per ton for all goods that pay to the Sleaford Trust and have such reduction established by the Act, it will not be advisable to have a navigation and that any meeting for the further prosecution thereof are unnecessary if the Commissioners do not agree to the above reduction."¹

However, they were not to be hurried into a decision about the reductions; the advantages of such could be seen but they would still

¹ Witham Navigation Minutes, Lincoln Archives.

not commit themselves as they were not convinced of the project's viability. Handley wrote to Henry Butler Pacey on January 6th. 1784 stating that, to overcome any objections which the Commissioners might have had to a toll reduction due to the doubts they entertained of the success of the navigation, the Sleaford subscribers were willing, provided the Commissioners would agree to take 9d. per ton, to have a clause inserted in a Sleaford Navigation Act empowering the Witham Commissioners to take 1/6d. per ton if they should not receive from a Sleaford Navigation a sum equivalent to the tolls then received from Kyme Eau, which were estimated at about £30 a year.¹

This seems to have hastened the Commissioners into action although, in the meantime, it would appear that the supporters had decided to begin proceedings in Parliament for a Bill and trust that they would come to an agreement with the Commissioners before it had advanced too far.

Handley's letter was considered by the Commissioners at their meeting on February 13th., at which time the whole situation was reviewed. They noted that any reduction of the tolls which it might be possible to grant in favour of a Sleaford Navigation could not be allowed to jeopardize the security of the money which the Commissioners had borrowed on the credit of their tolls, especially as the interest on this was considerable in arrears. Also, the Witham Act restricted them from lowering the tolls on the Witham until a competent part of that borrowed money had been paid off and then only with the consent of the mortgagees of the tolls.² They noted that cargoes were then being carried on part of Kyme Eau for which they received 1/6d. a ton and requested that the limits of the proposed navigation be sent to them as they

¹ Copy of the letter in the Witham Navigation Minutes.

² However, a clause in a Sleaford Navigation Bill to allow this would be unopposed by the Commissioners. See p.36.

would not have wanted to lose income by this traffic benefiting from a toll reduction. After much discussion it was decided that the Commissioners would not take more than 9d. a ton on goods brought in vessels navigating in Kyme Eau above the south-east corner of Anwick Fen.

Also, a general clause of reservation of the powers given in the Witham Act was requested to be inserted into the proposed Bill.

The first Bill of 1784.

The petition for leave to bring a Bill for an Act to make the navigation was presented to the House of Commons on February 18th. 1784.¹ No copy of this Bill has so far come to light but the provisions contained within it can be surmised and these will be considered later. The petition was referred to a committee under Sir John Thorold² and Mr. Charles Anderson Pelham.³

This committee reported back on March 16th.⁴ recording that it had examined John Varley on the engineering aspects and the costs of the works. Leave was then given by the House for bringing in a Bill, to be prepared by Sir John Thorold, Sir Peter Burrell,⁵ Mr. Anderson Pelham and Mr. Robert Vyner.⁶

The relocation of the toll reduction limit.

With leave having been given to bring in a Bill the Commons' record

1 House of Commons Journal, vol.39, p.925. House of Lords Record Office.

2 MP for Lincoln County. Elected to the seat in the 1779 by-election when Lord Brownlow Bertie became fifth Duke of Ancaster.

3 MP for Lincoln County.

4 House of Commons Journal, vol.39, p.1030.

5 MP for Boston

6 MP for Thirsk, Yorkshire. He had Lincolnshire connections and had held a Lincoln County seat, e.g. after 1774 and 1780 elections.

stops, just as it did in 1774. The Bill is recorded as being, "Not Presented,"¹ However, this time there is some reason for the Bill's withdrawal which is known about.

The south-east corner of Anwick Fen had been agreed to by the Commissioners as the place from which a reduction of toll taken on the Witham would begin. It would seem that instead of this, and without obtaining the Commissioners' permission, Benjamin Handley had altered the location to "Beffreys", which was then a ford located on the west side of South Kyme. Also, a new cut was proposed but no exact location was given for this. These were minor alterations but ones which, nevertheless, were a usurpation of the powers of the Navigation Commissioners and which, when challenged by them, probably necessitated the discontinuance of the Bill.

The Commissioners ordered that their Clerk write to Handley for a plan of the new cut and also for an explanation as to why these unagreed alterations had been made.

Almost a month went by, until May 22nd., when the Commissioners met again. In the meantime Handley had written his reply and he also attended in person. His letter was read in which he remarked that the cut, which was proposed to be made in the parish of Ewerby, would not affect the Commissioners as it would be short and made some distance above Anwick Fen's south-east corner. Therefore, it would not have been of any concern to the Navigation Commissioners as their tolls would have been unaffected in any way.

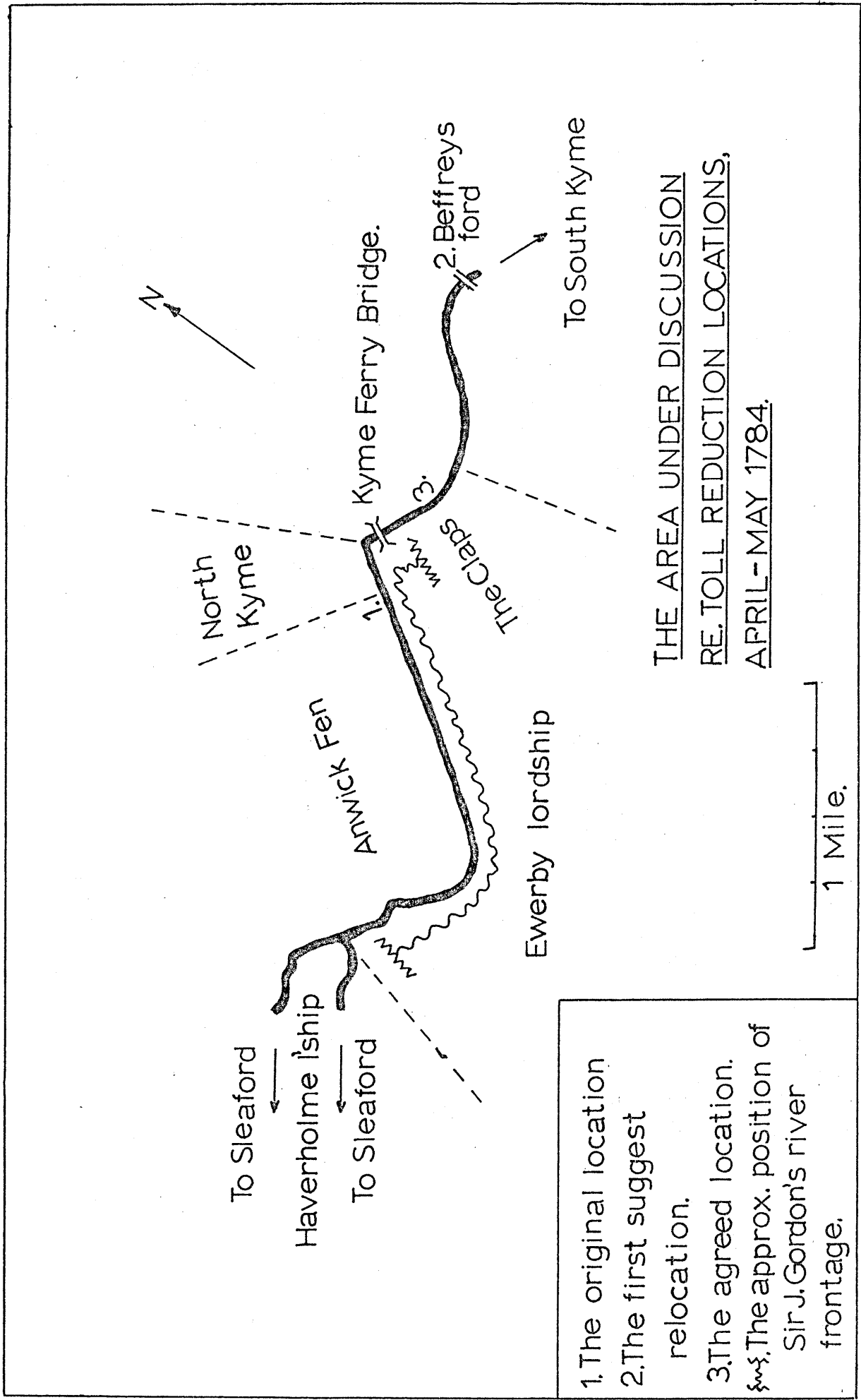
On the question of toll reductions and the alteration made from Anwick Fen to Beffreys (a place further down Kyme Eau, so shortening the length of river from which the Navigation Commissioners would receive reduced tolls) Handley gave a full explanation. The Beffreys ford appears only to have been a suggested place and one to which the Sleaford supporters were willing to compromise. Handley's letter

¹ "General Index of Journals of the House of Commons, 1774-1800" p.542. HLRO.

stated that Ewerby Claps was just as suitable as the Boffreys but to stay with the Anwick Fen location could give rise to a problem which had not been foreseen. The objection was that the lands of Sir Jenison Gordon adjoined the river from nearly the western end of Ewerby lordship to below South Kyme Ferry Bridge (see map). The situation could arise where Sir Jenison would not allow the proprietors of lands in Ewerby to use the river-frontage on his land, in which case they would either have to take their goods overland westwards, and higher up the navigation, to Haverholme and consequently pay more freightage, or take them over Ewerby Common to the river below South Kyme Ferry Bridge. If this occurred and the Ewerby goods were put on board below Anwick Fen, the location for the toll reduction, they would be subject to both the Sleaford toll and the whole of the Witham toll. The Ewerby proprietors would not agree to this and might well become petitioners against the navigation for this reason alone. Handley emphasised that the alteration was only intended to secure to the Ewerby people a freedom from a toll to which it had not been intended they should be subject.

Before the meeting, John Tharrat(t), the Witham Navigation's surveyor, had been instructed to prepare a report on the position as he saw it. He now presented this. The only major point which arose in this report was the possible loss to the Commissioners of tolls from goods which might be destined to be put on board from North Kyme. The surveyor concluded that the loss would be negligible as access to Kyme Eau north bank by road from North Kyme was very bad. There already existed a much better routeway northwards to Billinghay Skirth and most of the produce which was carried by water from this parish made its way northwards to that waterway rather than southwards to Kyme Eau.

The Commissioners accepted Handley's arguments and agreed to allow Ewerby Claps to be inserted in the Bill instead of Anwick Fen.



1. The original location
 2. The first suggest relocation.
 3. The agreed location.
 §. The approx. position of Sir J. Gordon's river frontage.

THE AREA UNDER DISCUSSION
RE. TOLL REDUCTION LOCATIONS,
APRIL - MAY 1784.

Fig. 4

The first opposition to a Sleaford Navigation

While the toll relocation situation was being resolved another arose which was to have serious consequences in the future.

Earlier that month, on May 12th., the Sleaford group had met to discuss some opposition to the proposed waterway which had come from the Commissioners of the 2nd. District of the Witham Drainage and certain of the proprietors of lands in Holland Fen. This opposition related to the proposed alterations to tunnels through the south bank of Kyme Eau which then took water onto Holland Fen. The navigation supporters decided to attempt to override the opposition with,

"...application be made by the Clerk to Lord Fitzwilliam and the several Proprietors and Persons interested in the proposed Works who are satisfied with the position of the Tunnels as proposed by Mr. Varley to give the Bill their support in Parliament."¹

The first mention of this opposition is found in the minutes of the 2nd. District Commissioners and began soon after the House of Commons Committee reported back.²

On March 24th. a meeting at the "White Hart Hotel" in Boston had elected a group of six Commissioners to inspect the Sleaford Bill and report how it would affect that Commission.

After three days they submitted their opinion which was that unless some of the clauses in the Bill were not altered the land and property in their District would be endangered, physically, financially, or both.³

This group of six were instructed by the Commissioners to attend

1 P.S.J. 9/6. Lincoln Archives.

2 Witham 2nd. District Minutes, 1775-85, BSIDB 2. Lincoln Archives.

3 Ibid. March 27th. 1784.

a supporters meeting in Sleaford the following Tuesday (March 30th) in order to have the clauses concerned altered but, at this meeting, the promoters of the navigation would not make any concessions despite the objections to the Bill which the six raised, viz. that the Bill was detrimental and dangerous to the general interests of the land-owners within that District; that it removed tunnels then used for supplying water to cattle on the Fen and that it weakened the banks of Kyme Eau and so endangered Holland Fen.

Having ignored these objections, the supporters resolved that a new Bill be presented to Parliament for the next session.¹

In response to this rebuff the 2nd. District Commissioners called a meeting of the proprietors of lands for Wednesday, May 5th. at Boston Town Hall to consider what to do. What was then decided was to present a petition to Parliament to be allowed to oppose the Bill.

So that it should be clear what was intended, this decision was published in both national and local newspapers - the "Stint James's Chronicle", "The General Evening Post", the "Cambridge Chronicle" and the "Lincoln, Rutland and Stamford Mercury."

Renewed Parliamentary activity, May, 1784.

With the relocation of the beginning of toll reductions settled, the supporters renewed their petition to Parliament for leave to bring in a Bill. This was on May 28th. 1784.² On this occasion the petition was referred to Mr. Anderson Pelham and Sir Robert Lawley.³

1 Ibid. April 20th. The determination for a new Bill so soon after the withdrawal of the previous one may indicate a foreknowledge of success with the Witham Navigation Commissioners over the relocation of toll reductions.

2 House of Commons Journal, vol.40, p.32. HLRO.

3 MP for Warwick County.

However, when it was reported on May 31st,¹ the spokesman for the Committee was Mr. Thomas Stanley.² It is unfortunate that the report of this Committee is missing from the official record in the "Journal" of the House of Commons - the few inches of the volume's column where it ought to appear being filled with printed stars! Even so, leave was given again to bring in the Bill and its preparation was once again placed in the hands of Sir John Thorold and Mr. Anderson Pelham, together with the Mr. Thomas Stanley mentioned earlier.

A copy of this Bill is extant³ although it is not in the Parliamentary records for the one deposited there was destroyed in the fire at the Houses of Parliament in 1834. The existing copy contains the alterations for the relocation of the toll reductions cited above and, therefore, must be the second of the Bills presented in 1704. As the first Bill was almost certainly withdrawn only in order to alter the toll clauses it is probable that all the other clauses were left as they were and represented in this second Bill.

As things were still not to go smoothly with the passage of this Bill, a consideration of the principal clauses will help explain subsequent events.

The main clauses of the re-introduced Bill of 1704.

The early clauses dealt with the directions for the course of the navigation and, in the main, these details correspond with those given in the Varley report. Scouring and deepening were to take place in Kyme Eau and along the Old River as far as the flood gates to be erected at Cogglesford Mill, so cutting off the meanders which were in that stream, and then along a branch leading to Sleaford Castle Causeway. The width of the bottom of the river from the Causeway to

1 House of Commons Journal, vol.40, p.43. HLRO

2 MP for Lancaster County.

3 SES BS 14.

Cogglesford Mill flood gates was to be 18'. These flood gates were to be made at least 40' wide. A weir 60' wide and a staunch with moveable slackers were to be erected at the lock furthest down-stream, at Ferry Booth, while weirs of 20' widths with slackers 1' deep were to be put down at each of the other locks. The upper sill of the lowest lock was to be 2" higher than the height of Holland Tunnel (thereby maintaining the water supply to that tunnel) and the weir to be sited there was to be 3' higher than the upper sill of that lock.

The cut intended to be made across common land ("The Holmes") to meet the New River at the Dyer's Mill is omitted from the Bill and two others substituted, one on the east side of a close belonging to the Earl of Bristol and the other made to the branch of Kyme Eau on the north side of this close. It will be remembered that these new works were one of the causes for the withdrawal of the first Bill of 1784.

The Bill then deals with the toll proposals and represent the results of the negotiations which had been conducted with the Witham Navigation Commissioners:

The tolls on the new Navigation were not to exceed 6d. a ton on all goods carried between Dogdyke and Ewerby Claps and not to exceed 3/- a ton between the lowest, or first, lock at Dogdyke and any place above the Claps. 6d. less was to be charged on goods passing from the Witham to or from any place between the Claps and Nun's Causeway than would have been charged if they had been carried above Nun's Causeway. No charges were to be made on pigeon dung or any other manures, except lime, which had a rate of 6d. per chaldron (approx. 2½ tons).

An explanation was given in the Bill for allowing the toll reduction in favour of the Sleaford intended Navigation by the Witham Navigation Commissioners, being the advantage which would accrue to that Navigation from the increased Sleaford trade.

This Bill, therefore, intended to amend the Witham Act as the Navigation Commissioners had already stated that the interest on the money borrowed on the tolls had not, for the most part, been paid off!¹

Passing on to the drainage details, the Bill mentions the tunnels through Kyme Eau south bank near Dampford Sluice (Holland Tunnel) and in Dogdyke, for taking water into Holland Fen and Wildmore Fen respectively, and Heckington Tunnel. It proposed that although they should remain in their then position, their size should be no more than 9" square - their being at that time 21" square.

Some of the powers of the Witham Drainage Commissioners were to be taken away as they affected these tunnels and given to the Navigation in order that the water level in the river could be maintained for vessels and this was particularly with regard to the stopping of existing drainage tunnels through the banks and the putting down of new ones.

The 2nd. District and North and South Kyme Commissioners, under the Witham Drainage Commissioners, were to have the management of the lock nearest the Witham for the purpose of controlling and turning Kyme Eau water into the Fens but their actual powers were severely limited by a clause stating,

"Nothing herein contained shall authorise or empower the said General of District Commissioners...to obstruct or impede, or direct such lock-keepers to obstruct or impede, the free passage of boats or other vessels through the said lock or upon the Navigation ... [the boats] shall be at liberty at all times² hereafter to pass through such lock and upon the said Navigation upon payment of tolls."

1 See p.37. and proceedings of the Witham Navigation Commissioners' Meeting of February 13th.1784.

2 Author's emphasis.

This clause would seem to be establishing the right of the Navigation to the use of the lock and that the Drainage Commissioners could not stop them for any, possibly malicious, reason. It appears to give the Navigation an ultimate control over the amount of water that could flow onto the adjoining lands.

The financial aspects of this Bill are rather sparsely reported. No details of the number of shares to be issued are given although they were probably to be in £100-units as the first "call" was not to exceed £5 for every £100, and all others were not to be more than £10 in every £100. The only financial fact mentioned is that the works were not to begin until £9,000 had been raised.

The use of the term, "Commissioners", in certain parts of this Bill when referring to that body which would run the intended Sleaford Navigation would seem to lend a certain amount of substance to the possibility that the organisation of the new waterway was to be similar to that which existed on the Witham.

The petition against the Bill.

On June 14th, the petition against the Bill was presented to the House of Commons by the 2nd. District Commissioners, so obviously any attempts by the supporters to suppress the opposition had failed.¹

Apart from the generalised statement in the Parliamentary records that the Navigation would endanger the Fen, etc., there also exists a handwritten document which sets forward further objections - those of the landowners of Holland Fen and which were probably compiled as a result of the estate proprietors' meeting of May 5th.² These arguments would have been presented to the Commons Committee examining the Bill.

The landowners' petition was based upon their claim for water from

¹ House of Commons Journal, vol.40, p.196. HLRO.

² "The case of the petitioners against the Sleaford Navigation, 1784."

Kyme Eau for watering their cattle by means of Holland Tunnel. The Bill proposed to reduce the size of this tunnel from 21" square to, at the most, 9" square. The landowners claimed that this would, together with the erection of pens and sluices, reduce by at least half the quantity of water flowing onto Holland Fen. They also expressed concern regarding the stability of the banks - it was their opinion that they would be more liable to be breached by the increased quantity of water flowing along the course due to the opening of streams and brooks further up the river and by holding up the water by the use of sluices.

They further claimed that as they already used the drains being fed by Kyme Eau water as navigations to Boston, these drains would run dry if the proposed plans materialised and that means of transport would be lost. Their argument becomes rather contradictory here as they claimed that they would have to use the more expensive land transport for their cereals (3/- per last¹ by drain c.f. 6/- per last by road) and this produced the problem of actually getting through on the bad roads in the wet season. Yet, in the wet season there would surely be no lack of water for the drains even with the intended Navigation operating and these small navigations could be used. Their argument should have been against a lack of water at harvest time which, if fortunate, is dry.

The 1784 Bill rejected by Parliament.

The House ordered that the Drainage Commissioners' petition be referred to the Committee and this was done. And then, just as before, proceedings stop. This time the Bill is indicated as being, "Not Reported". The arguments of the petitioners against had been too strong in the Committee and so there was to be no Navigation in 1784.

1 "Last" = 10 quarters or 80 bushels.

Disappointment amongst the supporters must have been great as land transport remained the sole conveyor of bulk goods, at least as far east as the Witham. On the other hand, the status quo had been maintained for the landowners of Holland Fen and the District Drainage Commissioners had retained full control of their drainage and land-preservation functions.

PART THREE

THE SUCCESSFUL PROMOTION :

1791-2

Renewed interest in a Sleaford Navigation - 1791.

The silence in the records now covers a period of 7 years and, when it is broken, it is again with a public meeting, as in 1782. At this meeting, called to promote a new attempt to obtain a Navigation, the same driving force is there in the person of Benjamin Handley and he is now actively aided and accompanied by a person of great national importance, Sir Joseph Banks, who played a small part in the previous aborted attempt to obtain an Act.

The public meeting was held at the "George Inn" at Sleaford on October 11th. 1791¹. Sir Jenison William Gordon was in the Chair and Sir Joseph and Benjamin Handley attended. The meeting appointed William Jessop and a local man, John Hudson, to prepare a plan and estimate of the works.

The appearance of William Jessop as consultant engineer and surveyor to the proposed Navigation raises the question of why such an eminent and busy consultant, such as he then was, should accept a post on what was, for him, a rather insignificant project. This question can be taken further by considering his undertaking a similar function about this time on the proposed Horncastle Navigation, an almost mirror-image project to the Sleaford but on the eastern side of the Witham.

The first reason, and probably of least importance, is that he may have taken an interest as he had been involved with the scheme early

¹ Reported in the "Lincoln, Rutland and Stamford Mercury" of October 21st. However, there must have been an earlier resurrection of the scheme as the Holland Fen landowners prepared a petition against it, dated May 23rd. 1791. See also, i) "Lincoln, Rutland and Stamford Mercury" of September 9th. 1791, ii) LRA 1/52, September 22nd. 1791, iii) BSIDB 2, October 5th. 1791.

in his career, in 1774 (see pages 26-7).

The second reason is more involved but more likely. In 1791 Jessop was living at Newark and, in addition to his canal interests, he held a partnership in the firm of "Handley and Co.", a cotton mill in that town. His partner was a William Handley and, although it cannot be proven conclusively at the moment, there is overwhelming circumstantial evidence that this was Benjamin's eldest brother.¹ It would seem that Benjamin may have prevailed upon his brother to induce his partner to come over to Sleaford to help them. This Jessop did, performing a favour for his partner as much as for any other reason. While in Sleaford his contacts with Sir Joseph Banks, who was also actively promoting the Horncastle Navigation, probably led to his involvement in that second waterway, although their mutual membership of the Smeatonian Society meant that they were well-known to one another before 1791.

In the preparation of the plan and estimate the engineers were asked to attend particularly to accommodating any of the adjoining estates along the river in their requests to avoid possible injuries to the land, to prevent damage, particularly financial, to the working of the mills and to use the course of the "New River", or "Sleaford Mill Stream" in preference to the Old River as had been utilised in each of the previous three surveys.

It is known that at least one of the millers along the river welcomed the enterprise. Benjamin Handley contacted the miller at Cogglesford Mill, William Almond, and he was told that,

"... he has for a few years past been able to work only 8 or 9 hours in the 24 for that part of the water had been improperly diverted from its course by the occupiers of lands above Sleaford ... [and] if, in the execution

¹ See "Newark Advertiser", Wednesday, September 4th.1901

of the proposed works, a reservoir was formed ... it would amply compensate for the loss by the passage of vessels."¹

Having by now come to expect opposition, this meeting called for those who would oppose a navigation, and those who would favour one, to attend the next meeting. It did happen, though, that one person, Francis York, did make his views known at that assembly.

Francis York was agent for a number of the landowners in Holland Fen and represented holdings totalling about 400 acres. He was also the surveyor of the 2nd. Drainage District. He maintained that the 2nd. District Commissioners had a right under the Witham Act to run Holland Tunnel, by way of Clay Dyke, to the South 40 Foot Drain and that unless the water was allowed to flow into the South 40 Foot many of the inhabitants of Holland Fen would be deprived of water for their cattle. Here again was the same argument being put forward. The effect of it on the meeting proved, in the first instance, to be great. It will be remembered that the Chairman of the meeting had told his audience that Jessop and Hudson were to prepare their plan with due regard to the prevention of financial loss to the adjoining estates. This instruction to the engineers must have been heeded by the gathering for Sir Joseph Banks noted,

"The Sleaford people were inclined to compromise with the 2nd. District by giving them the direction of a lock to be placed immediately below the tunnel and agreeing that when they did not choose to let it be opened, the boats should unload and reload above the lock."

This statement is interesting in that it shows, as with the Varley plan, that certain decisions had already been taken regarding the construction of the navigation, such as, the lock below Holland Tunnel had already been decided upon even though the engineers had only been instructed to prepare their plan earlier in the same meeting.

¹ October 29th. 1791. SGS BS 14/1/5.

When Sir Joseph saw the majority tending towards this compromise he objected. In a reverse situation here was the clause of the 1784 Bill reappearing¹ which gave control of part of Kyme Eau water exclusively to one party. He pointed out that to approve the compromise and have it incorporated into an Act would give Parliamentary sanction to the opponents' claim for the whole of the waters of Kyme Eau. Such a proposition would only raise costs and, thereby, reduce the waterway's competitiveness with other forms of transport. Probably in private conversation a little later, William Jessop told Benjamin Handley that such trans-shipment would cost about 2d. a ton.

In order to clarify the position about the tunnels, some of the Witham Drainage Commissioners present suggested that an inspection of all the tunnels on the river might be worth while. October 20th. was the date put forward for when this view might take place.

In conclusion the meeting appointed Benjamin Handley and Benjamin Chetles as solicitors to any Bill which may be presented and also, in the meantime, to transact any business that might arise.

A view of the River Slea/Kyme Eau - October, 1791.

Sir Joseph Banks made a record of a voyage he made on the River Slea/Kyme Eau at the end of October, 1791. On this occasion he was accompanied by Sir Jenison Gordon and a Mr. Linton and a Mr. Anthony Peacock. As all except Sir Jenison were Witham Drainage Commissioners this was probably the authorised inspection party. Sir Joseph's record is of great importance as it is the fullest description there is of the state of a large part of the river in the late 18th. century in any of the records relating to the proposed navigation. In the main it deals with the tunnels but additional information is also included.

1 See the "at liberty at all times" clause on p.45.

2 "A view of Kyme Eau", October 28th. 1791. SGS BS 14/1/2

Beginning at the Sleaford end, the first tunnel studied was the one into Anwick Meadows, called by Sir Joseph, "a ditch", but alternatively known as "New Ing Bars Tunnel". This was 9" wide and 10" deep and marked the northern boundary of the Witham Trust. The ditch was about 220 yards long and ended in a pond where the cattle of Anwick Fen came for water.

Returning to the junction of the ditch and Kyme Eau the report noted that the surface of the river appeared to be 3-4 feet higher than the land to the south and the bottom nearly level with that to the north. The river was at its normal height on that day and Sir Joseph remarked that it was so shallow that the small boat in which they were travelling scraped the bottom almost continuously.

Continuing, Flax Dyke was next seen, being the southern boundary of the Witham Trust and then being used for a water supply by the village of Ewerby.

Anwick Booth Tunnel (Booth House Tunnel) followed. This was noted as watering Anwick and Ruskington and was the property of the parish of Anwick, with Ruskington parish paying Anwick for their water.

Old Eau Tunnel lay on the north side of the river and supplied water to North Kyme Pry Grounds. The water from this tunnel ran into Billinghamay Skirth, showing that Kyme Eau was the higher of the two.

At Ferry Tunnel the Cardike was seen to the north, with Anwick lying beside it and from Ferry Bridge to Ewerby Claps Kyme Eau ran in the channel of that waterway.

Claps Tunnel, on the south side, supplied Heckington. A sunken tunnel, it carried water from North Kyme into a large channel cut on the site of the Cardike.

Following the Claps Tunnel came Beffries Tunnel. Sir Joseph noted this as being used for certain lands in South Kyme. In his account he uses the spelling, "Boeuferies" and suggests the derivation of the name as being from, "lands where beaver were anciently fed". Also recorded was that the largest landowner in that part, Sir Abraham Hume, had recently rebuilt Beffreys Bridge and expected to be repaid for this expenditure by the Navigation.

Five Acre Tunnel came next, followed by Pig Yard Tunnel at South Kyme. This is noted as not having been used for at least the previous 12 years, i.e. since 1779. Under the Town Bridge in South Kyme was seen an old staunch which the inhabitants claimed to use for washing their sheep. However, this was a relatively recent construction as it formerly stood at Clay Bank Bridge and had been rebuilt in its new location at least within living memory.

The next three tunnels, Clay Pit, Topham's and Five Acre (a second with that name) are mentioned but no comments made regarding them except their dimensions.

Long Bank Tunnel was next and, like Ferry Tunnel already mentioned, watered Dampford Grounds, in this case about 900 acres.

The party had now arrived at the tunnel which was causing them the greatest difficulties in having a navigation established, Holland Tunnel or, as it was also called, Dampford Tunnel. As would be expected, more time was spent examining this than any other of the tunnels and Sir Joseph prepared a much fuller report on this.

At the time the party saw it the tunnel had a door fitted to it at the river end and it proved impossible for the group to raise this high enough to measure the height of the brick arch. However, they did note that there was 32" of water on the apron. The opposite end of the tunnel was accessible where it discharged its water onto the fen and this measured 19½" wide and 31" deep. It was laid on an inclined plane and this produced such a flow that,

"... when it [the door] was opened the water got past, roaring through it with a great noise."

To emphasise the effect that this tunnel would have on the water which would be needed to operate a navigation, the report continued,

"... it turned the whole current of the Eau into it, drawing the weeds from below."

At this point Sir Joseph made a most startling statement, the substance of

which must have been raised for discussion at some previous time but for the first time was now put on paper. The disclosure, which Sir Joseph says was told to him by Mr. Peacock, was that while there could be no doubt that the river banks were invested in the Witham Drainage Commissioners at that particular location, the land extending to a ditch about 100 yards past (that is, to the east of) Holland Tunnel was in the parish of South Kyme and so was not in the jurisdiction of the 2nd. District which had authority only as far as the parish boundary from the east. It would seem that Holland Tunnel was under the control of the 6th. District. If this was true this put a completely different complexion on the negotiation with the 2nd. District for it could not claim any right to interfere in any way with the tunnel. All the opposition put forward by them regarding the tunnel would be invalid as they would not be the competent authority to deal with it. If this had come about due to a change in the position of the parish boundary of South Kyme between 1762 (when the Witham Act designated the jurisdiction of the Drainage Districts) and 1784, then the opposition they had presented to the Sleaford Navigation Bill in Parliament in that year would also be invalid.

Unfortunately, the records to prove this boundary have not survived and so we have only this third-party evidence that it was in the location stated. However, this argument proved to be of importance later.

After Holland Tunnel, Petchet Corner, Drury Dyke and Dogdyke Tunnels were visited and then the group returned to Holland Tunnel and rowed down Holland Dyke to the point where it joined Clay Dyke. In their observation of Clay Dyke it was seen that the land on the sides of it, especially in the region of the South 40 Foot Drain, were too high to receive water for cattle and that there were, anyway, very few drains to be seen for that purpose. This would tend to put into question the actual claim of the Holland Fen land-owners that the water was needed for this, although a right to water would not be lessened to any extent by the non-exercise of the right.

There exists one document from this period which summarises the information gained about the tunnel sizes along Kyme Eau and is as follows -

"An account of the tunnels laid through the banks of Kyme Eau for taking water into the lands." ¹

<u>Name of Tunnel.</u>	<u>Side of Kyme Eau.</u>	<u>Width.</u>		<u>Depth.</u>	
		<u>Ft.</u>	<u>Ins.</u>	<u>Ft.</u>	<u>Ins.</u>
1. A tunnel into Anwick Meadows.	North	- .	9	- .	11
2. Flax Dyke Tunnels into Ewerby Fen.	South	- .	7½	- .	11½
3. Booth House Tunnel into Anwick Fen.	North	- .	6½	- .	9½
4. Old Eau Tunnel into North Kyme Fry (or Prau) Ground.	North	- .	9	- .	10
5. Ferry Tunnel into South Kyme.	North East	- .	7	- .	10
6. Ewerby Claps Tunnel into Cardike.	South West	- .	7½	- .	9
7. Boffreys Tunnel into South Kyme.	South	- .	7	- .	11
8. Five Acre Tunnel into South Kyme.	South	- .	5	- .	8
9. Pig Yard Tunnel into South Kyme.	South	no details			
10. Claypit Tunnel into South Kyme.	South	- .	6	- .	10
11. Topham's Tunnel into South Kyme.	South	- .	6	- .	10
12. Five Acre Tunnel into South Kyme.	South	- .	7	- .	10
13. Long Bank Tunnels into Kyme Dampfords (Dampford Grounds)	North West	- .	7	- .	10
14. Dampford Tunnel into Holland Fen (Holland Tunnel - river side)	North West	1 .	10	3 .	2
15. Ditto. (fen side)	South East	1 .	7½	2 .	7
16. Fetchet Corner Tunnels into Harts Ground, Holland Fen	East	- .	7¾	- .	11
17. Drury Dyke Tunnel into North Kyme.	West	1 .	10	1 .	8
18. Dogdyke Mill Tunnels into Billingham Dales.	West	1 .	6	1 .	0

¹ This undated document is not in Sir Joseph Banks' handwriting and is probably the result of a survey conducted by Jessop and Hudson. The writing looks like that of John Hudson. SGS BS 14/1/2.

A water link through the High Bridge, Lincoln.

In a letter from Benjamin Handley to Sir Joseph Banks, written on December 6th. 1791, a proposal is mentioned for improving the link between the River Witham and the Fosdike Canal in Lincoln. At that time goods had to be carried by land around the High Bridge as there was no navigable communication between the two. If these two waterways could be better connected, Boston and Sleaford would be directly linked with the developing industrial heartlands of England, in the Midlands and the North. This would, of course, be of great advantage as far as trade was concerned for the whole of the Sleaford area and for this reason Handley was raising it with Sir Joseph who was, at that time, engaged upon bringing into operation the Horncastle Canal on the River Bain, which canal would be similarly advantaged by such a link. With this link with the northern counties in mind, the proposed plan being prepared by Jessop and Hudson would be suitable for allowing Yorkshire vessels to pass through.

As against the Sleaford Navigation, opposition regarding a High Bridge scheme had come from the landowners but this time from the Lincoln area. However, their opposition was for a different reason and the remedy appeared much simpler. The landowners above Lincoln were afraid that water would be let off during times of scarcity, so making their situation with regard to lack of water worse, while those below Lincoln believed that the locks (which were planned to control the water flow and facilitate traffic) would be opened in flood periods, so subjecting them to an increased danger from flooding. The solution to both these fears appeared to be the construction of an additional lock in a cut to be made through Lincoln itself.

In his reply, Sir Joseph stated that he had been in contact with his associates in Horncastle and that they had expressed considerable interest in the proposed link.¹ He thought that the support of the two proposed navigations would help quiet the minds of those landowners who opposed

1. SGS BS 14/1/5. The most likely date for this letter is January 6th. 1792. as evidenced by internal information in Handley's reply of January 9th.

it, especially those below Lincoln in particular,¹ if these navigations would undertake between them to provide the money for the erection and maintenance of staunches and pens in the River Witham to be used to prevent damage or flooding to the banks and lands on either side due to an added supply of water; these works to be under the management and control of the Witham Drainage Commissioners. Sir Joseph estimated the total cost would be approximately £500, although he considered that an amount of twice as much would be worth it in the light of the opening to additional markets which it would give the navigations. Further, the financial advantages of access to these new markets for their corn and wool would also probably be sufficient to convince the landowners.

Handley was in agreement with Banks that even a larger sum than £500 could not be regarded as excessive by the promoters of a Sleaford Navigation although in his written reply² he did suggest that a link by way of the Sincil Dyke rather than the High Bridge should be adopted and he had reason to think that some of the landowners then objecting may be converted into supporters of that scheme as the fears of flooding and drought would be removed by using the Sincil Dyke line. The only objections he could still see could have come from Richard Ellison II, the lessee of the Fosdike Canal, as he would not receive the advantages he would otherwise have had as the water level at Brayford Head would need to be raised by about a foot if the High Bridge scheme was put into effect and he would also lose the Witham water which had to flow through Sincil Dyke. However, these disadvantages would be offset by the benefits he would derive from such as

1 " ... Lord Monson and several proprietors above Lincoln and every landowner of consequence between Lincoln and Billingham, to whom may be added Lord Exeter ..." Ms. R.2:48. Banks Collection, Sutro Library, San Francisco, California, U.S.A.

2 January 9th. 1792. Ibid.

communication through Lincoln.

In his reply to some of these points,¹ Sir Joseph remarked that the land-owners above Lincoln would not be hurt by the scheme if a drainage tunnel, which would help keep their land free from flooding, was laid under the Witham. Handley had said that the High Bridge was an obstruction to navigation as it was so low that during any period of flood the speed and height of the water would make it impassable. Banks did not see this as a great objection for he noted that when a boat could not pass under the High Bridge it also could not pass under Torksey Bridge, which led out into the Trent, so any traffic would be halted anyway.

The Jessop and Hudson survey, 1791.

Jessop and Hudson's report and estimate² for the intended navigation was published on November 25th.1791. and differed in many respects from the Creassy and Varley ones of two and one decades earlier respectively. Not least it differed in the route chosen from Flax Dyke to Sleaford Castle Causeway utilizing, as it did, the Sleaford Mill Stream rather than the Old River. A reason for this choice was that, in this report's view, the Mill Stream being wider and deeper than the Old River appeared preferable as it would supply adequate water for lock operation even in the dry season. The report estimated that 240 locks, of dimensions 60 feet long, 15 feet wide and with a rise of 6 feet, could be filled and emptied daily without hindering the working of the mills along this waterway.

The fall of water from Cogglesford Millpond at Sleaford to the surface of the River Witham, in summer, was calculated at $41\frac{1}{2}$ feet over a horizontal distance of $13\frac{1}{2}$ miles, giving an average gradient of approximately 1:1660.

1. Draft notes of his reply, undated. Ms.2:47. Sutro.

2 "Report on the means and expense of making navigable the Kyme Eau and River Slea from the Witham to Castle Causeway, above the town of Sleaford." 25th.November.1791. Held privately by H.Andrews,Bsq of Sleaford.

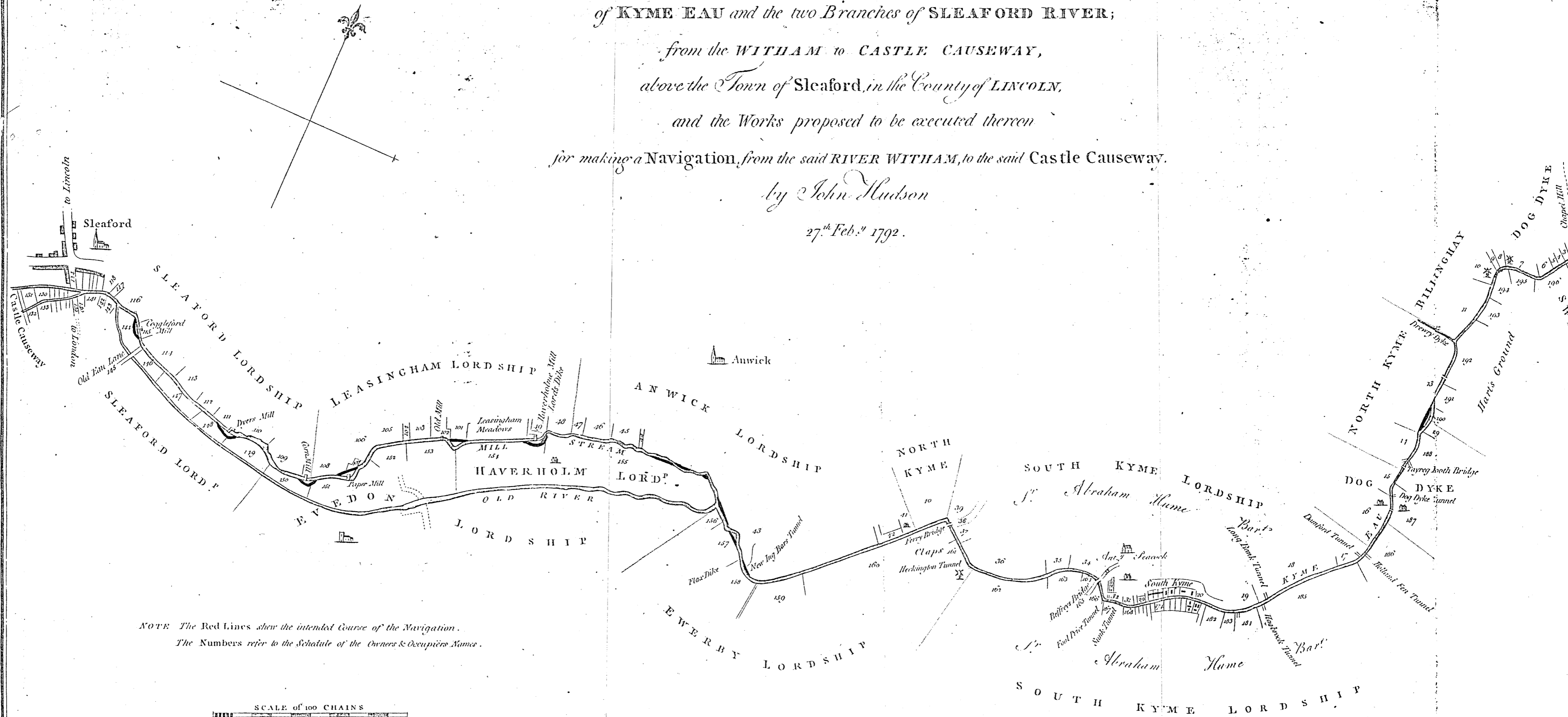
A PLAN exhibiting the Course
of KYME EAU and the two Branches of SLEAFORD RIVER;

from the WITHAM to CASTLE CAUSEWAY,
above the Town of Sleaford, in the County of LINCOLN,
and the Works proposed to be executed thereon

for making a Navigation, from the said RIVER WITHAM, to the said Castle Causeway.

by John Hudson

27th Feb. 1792.



NOTE The Red Lines show the intended Course of the Navigation.
The Numbers refer to the Schedule of the Owners & Occupiers Names.

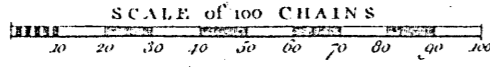


Fig.5

The John Hudson survey plan for a
Sleaford Navigation, February, 1792.

According to the survey, this fall would require 7 locks of the dimensions stated above to provide a constant depth of 4 feet of water in Kyme Eau from the Witham to Haverholme Mill and 5 feet in all the millponds, which would allow the mills to draw off up to 1 foot of water. A bottom width of 18 feet and a surface width of 28 feet was planned, together with passing places for the vessels.

Beginning at the River Witham, it was proposed to deepen Kyme Eau to the level of the bottom of the Witham from the junction of the two waterways for a distance of about $1\frac{1}{2}$ miles (135 chains) and there to build a lock with a 5 foot rise. A second lock was to be constructed 500 yards (24 chains) above Flax Dyke with a 7'6" rise and this lock would hold up the water as far as the tail of Haverholme Mill. A total of five more locks were then contemplated, one at each of the mills along the Mill Stream, with the exception of the "Old Mill". The first two locks built were to have staunches in order to allow for the drawing-off of surplus water.

Earth moving during construction was to be limited to widening the north bank from Drury Dike to Ewerby Claps.

As with the earlier reports, the claim was made that the drainage of the surrounding area would be improved by these works. As the water level of Kyme Eau below the second lock would be lower than previously, the low-lying ground in Anwick Meadows, at Ewerby and at Haverholme would have an outfall into the navigation which would drain them completely.

Tunnels which had been laid through the banks of the existing waterway for watering cattle would, in many instances, require alteration due to the raising of the water level by reason of the construction of the locks. They would become relatively lower than they then were and would need raising. Yet again, the only tunnel which was noted specially as requiring considerable alteration was Holland Tunnel.

The total amount of the estimate made by William Jessop and John Hudson for completing the works, which included earth moving, deepening and widening the river, building seven locks and two lock houses, constructing

and altering a total of eleven bridges, altering tunnels, building soke dikes and purchasing land, was £9,979/4/0d.

A comparison of the 3 estimates for the navigation's construction.

	<u>James Creassy</u>	<u>John Varley</u>	<u>Jessop & Hudson</u>
	<u>1774</u>	<u>1784</u>	<u>1791</u>
1.	£2,078. 9. 6d.	£3,507.13. 5d.	£3,641. 0. 0d.
2.	£2,779.18. 4d.	£2,749. 4. 9d.	£3,670. 0. 0d.
3.	£ 356. 0. 0d.	£ 560. 0. 0d.	£ 890. 0. 0d.
4.	£ 102. 0. 0d.	£ 111. 0. 0d.	£ 105. 0. 0d.
5.	£ 7. 0. 0d.	£ 200. 0. 0d.	£ 300. 0. 0d.
6.	nil	£ 29. 0. 0d.	£ 76. 0. 0d.
7.	£ 480. 0. 0d. (16 acres)	£ 390. 0. 0d. (14 acres)	£ 270. 0. 0d. (18 acres)
8.	£ 120. 0. 0d.	£ 60. 0. 0d.	£ 120. 0. 0d.
9.	nil	nil	£ 907. 4. 0d.
	<hr/>	<hr/>	<hr/>
	£5,923. 7.10d.	£7,606.18. 2d.	£9,979. 4. 0d.
	<hr/>	<hr/>	<hr/>

Key

- 1 = Earth-moving, deepening, widening and building soke dykes.
- 2 = Work associated with the locks.
- 3 = Bridge-building and alteration.
- 4 = Tunnels.
- 5 = Gates, fences and haling path.
- 6 = Wall building in Sleaford.
- 7 = Purchase of land.
- 8 = Lock houses.
- 9 = Contingencies at 10%.

Renewed opposition from the Holland Fen landowners.

Even before Jessop and Hudson's scheme had been published opposition to it was being voiced, particularly by the Holland Fen landowners.

They raised a number of points amongst which was the claim of insufficiency of water to the Fen as a result of the construction of the navigation, a claim which, as has been seen, was not a new one. Holland Fen came within the jurisdiction of the Witham Act and comprised an area of upwards of 20,000 acres. The object of the Witham Act in this region was to provide water in dry seasons and drainage in wet and this was achieved by means of Holland Tunnel, a then 21-inch square tunnel laid through the bottom of the south bank of Kyme Eau. It was the right claimed by the landowners to this water which was to be the subject of the opposition for, as the provisions of the intended navigation then stood, a tunnel 9" deep and 4'1" wide was to be built in lieu of Holland Tunnel. The landowners contended that this new construction, when running full, would only produce two-thirds of the water being obtained from that already existing.¹ Further, in dry seasons there was a likelihood of the water level in the river not reaching the bottom of the new tunnel as the sill of this tunnel was to be only 9" below the maximum height of the river surface as controlled by a sluice to be erected at Drury Dyke. The landowners would only agree to a tunnel which would supply as much water, when running full, as the old one did particularly as they said that the cattle of the Fen had hardly enough water as it was during dry seasons - any less would be disastrous to pastoral farming. It appears that a daily supply of at least 7-8 hogsheads (700-1,120 gallons) of water per animal on the Fen had been calculated by the engineers by using a tunnel of the proposed dimensions but the landowners objected that this total flow did not take into account losses through the sides and beds of the drains by seepage and general evaporation, an important consideration especially during, and just after, dry spells.²

¹ See Appendix C, 1 - 4. for a discussion of this statement.

² See discussion of this in "Farming in Lincolnshire". R.A.S. paper, 1951.

By way of precaution against being wholly or partially cut off from the water of Kyme Eau in consequence of the elevation of the proposed tunnel to the surface of the projected navigation, the landowners offered a clause to the navigation promoters which they had, up to then, rejected. This clause, to be inserted into any proposed Act, was to ensure a flow of at least 6" constantly. The landowners had consulted the promoters' own engineers, Jessop and Hudson, and they had agreed that between 6" and 7" would flow, which was perhaps more than passed through the existing tunnel in dry seasons and they saw in this agreement that there could be no objection to their clause.¹ The landowners saw their argument proven in the supporters reluctance to accept the evidence of their own engineers as proof that, in the supporters' opinion, Kyme Eau could not fulfil both a navigation and a land-watering function. The apprehension which they observed in the supporters as to an insufficiency of water was their own apprehension, a view they claimed was supported by James Gressy, a native of Holland Fen and the engineer of the first navigation scheme in 1774.

While the landowners had no objections to a navigation per se., they contended that additional works, at their cost amounting to about £100, should be included in any proposed Act to ensure their water supply.

The landowners also claimed that they would have had no objections at all had the proposed navigation not been an elevated one. Instead of reviving the principle of elevation, like that put forward in 1784 and which was defeated in Parliament, but kept to the height of the Witham as far as the limit of the Fen which, they said, was the only plan consistent with the principles found in the Witham and Black Sluice Acts, no problems would have arisen. This was the plan adopted in 1774 and the landowners record that they had consulted with William Jessop and he fully approved that part of it which related to keeping to the level of the Witham, although what his reaction had been to the rest of the scheme is not recorded. In the

¹ What this clause was is nowhere recorded but it probably formed the basis of an amendment to the 13th. enacting clause of the 1792 Bill (see p.84).

landowners' opinion a plan of this type would give additional security to the land by supplying more dredged material to be used to provide greater stability for the banks.

Another use made of Kyme Eau waters was that of enabling the drains to be used as navigations. Farm buildings were frequently sited alongside the drains to take advantage of this facility. Their necessity was argued due to the very poor state of any land routes for the transportation of cereals away from Holland Fen. The landowners made the perhaps naive assumption that as the Witham Act made no reference to this use for the water, whatever additional use they made of it was their own affair. However, the Black Sluice Act of 1765, the jurisdiction of which extended over Holland Fen, does mention these navigations as being protected and the Amendment Act of 1770 confirms their existence.¹

A final fear expressed by the landowners was that while they wished to preserve the water they claimed as a right, they did not want to be swamped which they saw as being the case as there was a danger of the intended navigation's works diverting water from South Kyme Fen and from the lands lying to the north of Kyme Eau into Holland Fen by means of soak dykes. This had happened before the passing of the Witham Act and that Act had ordered the offending tunnels to be removed.²

1 "And be it further enacted, by the Authority aforesaid, that nothing in this Act shall in anywise obstruct or prejudice the Navigation heretofore used and exercised in and upon any of the Drains within the boundaries of this Act, and that the staunches and bridges to be erected by virtue of this Act shall be so constructed as not to prejudice or obstruct the said Navigation in any shape whatsoever." Black Sluice Act, 1765. p.17.

2 The landowners' arguments and claims are set out in, "Petition against the Proposed Act, etc.", dated May 23rd.1791, SGS BS 14/1/2; also in "Copy Evidence taken before the Committee of the House of Lords", SGS BS 14/5; also in "Reports of the Committees of the House of Lords", 1792. HLRO.

Major Cartwright's opposition.

Having considered the general reasons for opposition to the proposed navigation it is perhaps convenient here to see how one particular landowner saw himself personally affected by it. The most comprehensive record of personal opposition which exists is contained in letters written by Major John Cartwright¹ to Sir Joseph Banks. Major Cartwright was a 2nd. District Commissioner as well as being a Holland Fen landowner. He occupied Brothertoft Hall² and was a producer of wool, woad and corn.

His first communication to Sir Joseph immediately sets forth his concern,

"I am really much alarmed and apprehensive that when such Navigation should be furnished with a sufficiency of water, the landowners of lands in Holland Fen must be great sufferers for want of water and that, from circumstances perculiar to myself, I think that inconvenience would be felt by myself far more than any other individual. Unless further light should give me a clearer view of the matter, I must, of course, approve the opposition that will be made to the Navigation and, on the principle of self-defence, must join them."³

The major argued that if the navigation was a good thing for the public then the navigation should pay for any damage it would do to the landowners,

"... if not willing, I should not be willing to accommodate them at my expense, if not able, should it not prove the plan as far as it respects the public, ineligible."

This is rather unfair as the supporters had never claimed that they would not pay for any damage done.

1 John Cartwright (1740-1824), known as the "Father of English Radicalism".

His brother, Edmund, invented the power loom, a wool-combing machine, etc.

2 Now known as Brothertoft Hall (O.S. Sheet 131, GR 269464, 1:50,000 series).

For a contemporary account of Major Cartwright's farm, particularly the cultivation of woad, see A. Young, "General View of the Agriculture of the County of Lincoln." 1799, p.174-182.

3 November 28th. 1791. SGS ES 14/1/1.

The detrimental effects to him personally, though, he makes very clear. He declared that as the waters which served his lands were derived from Holland Tunnel by way of the North 40 Foot Drain, then if the tunnel was reduced in size¹ the water from it would only reach the estates between him and the tunnel and be wholly absorbed before it reached "Rothertoft". He claimed that experiences of that very year had demonstrated how much his estates would suffer from such an event.

Another consequence of a water reduction would be to deprive him of a "Fence", $1\frac{1}{2}$ miles in length and would also leave him without a navigation which he claimed was essential to a costly scheme he had recently completed. This had included the building of a large mill and equipping it with machinery. He stated that at the time he first valued the estate and considered how far it could be adapted, the navigation provided by the North 40 Foot Drain giving access to the port of Boston, was a deciding factor. A $\frac{1}{2}$ -mile long cut, constructed about 20 years before, also existed, which led from the North 40 Foot to the main barn of the estate which, for four months in 1791, had daily carried the produce of 180 acres of wood. At the head of the cut a corn-threshing machine had been erected. He observed,

"...You will form some judgment of my inconvenience should this Drain, for want of water, cease to be a certain navigation."²

Major Cartwright summarised his objections in relation to his present navigation as being that the problem with corn was that the harvest coincided with the dry period, a time of usually low water. Any further reduction in the water supply would leave him without a navigation and so he would lose profits by having to use high-cost land transport. Thus, the loss of a navigation on the Drain was equivalent to him losing the opportunity of making further improvements on his estate and he was especially aggrieved as past improvements had been made on the confidence of being protected by law.

¹ See Appendix C, 1 & 2.

² Arthur Young's, "General View, etc." p.174-5 shows this machinery and cut.

Authority over Kyme Eau waste water.

In his reply,¹ to Major Cartwright, Sir Joseph gave some information concerning a dispute between the Witham Drainage Commissioners and the Black Sluice Commissioners, the subject being which authority owned the waste water of Kyme Eau. The arguments in this dispute had a direct bearing on the Holland Fen landowners' claims.

Clause 55 of the Witham Act allowed for the watering of cattle from the Kyme Eau waters while the Black Sluice Acts of 1765 and 1770 allowed for navigation on the drains fed by this water. Clause 56 to the Witham Act allowed for a moveable staunch to be erected below Holland Tunnel incase the water level in the river should be so low that it would not otherwise run through the tunnel to feed the drains. This situation could arise, say, if the water level in Kyme Eau dropped below the sill of the tunnel during the summer months.

Sir Joseph pointed out that while the occupiers of Holland Fen had a right under the Witham Act to take from Kyme Eau as much water as was necessary for the use of their cattle in dry seasons, it was also clear that they did not derive any right under the Act to use the waste water for navigational purposes. If this was to be allowed, Sir Joseph claimed, the damage to the Witham works could be considerable. He maintained that Kyme Eau was the best feeder the Witham possessed² but for several years previously, in the dry weather of summer, its waters had been entirely diverted and carried by the various drains into the South 40 Foot. The consequence of this was that while the doors of the Black Sluice had been kept free of silt deposits, the Grand Sluice was generally choked with silt for several months. During 1791 there had been 11' of hard silt measured at that location. This had caused a ponding-back of the Witham

1 Dated December 2nd.1791. SGS BS 14/1/1.

2 "Kyme Eau produces, by Mr. Jessop's account, 432,000 cubic feet of water per day in dry season [it] furnishes one-half of the living waters of the Witham." "General observations on the present state of Dampford Tunnel." May 10th.1791. SGS BS 14/5.

waters and a consequent possibility of damage to the river's banks due to a build-up of water pressure. Coupled with this was that the value of the lands drained by the Witham was in jeopardy, as was the expenditure paid in making the Witham works between 1762 and 1788. Sir Joseph continued,

"Now, if navigation along the ditches cut in the Fen for purposes of watering cattle was in the contemplation of those who proposed the [Witham] Act which seems to be improbable, it was certainly not the intention of the Legislature to endanger the whole work they were establishing by giving a power to run waters necessary to preserve it through a different channel and into a distant country for the convenience of inhabitants who paid no taxes."

It is obvious that as Sir Joseph was one of the Witham Drainage Commissioners he would side with their argument, in fact, he was probably one of those who formulated it. However, he did not wish to antagonise the Major and assured him that if any way could be found of securing his navigation and, at the same time, preventing Kyme Eau water being run off into the South 40 Foot, that would be done, although he did also express his doubts that things would be easily settled with the Black Sluice Commissioners.

The changing opinions of the 2nd. District Commissioners.

Negotiations over Holland Tunnel had been taking place between Benjamin Handley and the 2nd. District Commissioners during the early part of December, 1791. Even though there was the possibility that they had no rights over the tunnel itself they did have a claim to its waters and Handley was possibly following Sir Joseph's lead with Major Cartwright in attempting to settle differences amicably. In a letter to Sir Joseph written on December 13th.¹ Handley informed him that he had reached agreement with the Commissioners regarding the heads of clauses relating to the tunnel in any future Act. He considered that the Witham Drainage

¹ SGS BS 14/1/5.

Commissioners would guard their powers in any matter arising on the subject,

"I am aware that I mentioned that the tunnels may be objected to by the General Commissioners for Drainage but as the powers of this commission are not to be affected by the Sleaford Bill¹ I do not think the size of the tunnels worth consideration. On the contrary, the stipulation introduced by Mr. Barnard that Holland Tunnel shall be of its present extravagant dimensions and the request made in consequence of it by persons interested in other tunnels that they should be increased proportionally to the extent of Holland Tunnel beyond 21 inches square will give the General Commissioners greater cause to exercise their authority whenever it may be thought expedient."

The 2nd. District Commissioners met on December 17th. and proposed a clause for the intended Sleaford Act² which would make it lawful for the Sleaford Navigation operators, or any 7 or more of them, to discontinue the use of Holland Tunnel and put down other tunnels in its place as and when the convenience of the navigation should demand. However, this work was to be done under the direction of the surveyor of the 2nd. District and this demonstrates that they did consider that theirs was the legitimate authority over the tunnel. Further, if any 5 or more landowners in Holland Fen should feel that the new tunnels were not supplying as much water for their cattle as previously, the 2nd. District Commissioners were then to have the right to construct a tunnel through the south bank of Kyme Eau where the old tunnel was of similar capacity and size as the former one.

1 The first mention of clauses having been decided upon and settled for a Bill.

2 "Heads of clauses proposed by Mr. Samuel Tunnard, clerk to the 2nd. District Commissioners, in obedience to an order made at a meeting held on 17th. December, 1791." SGS BS 14/1/1.

On December 13th. Handley had written to Sir Joseph saying that agreement had been reached with the 2nd. District; on the 17th. the 2nd. District had proposed a clause for the Act which would place the continued operation of a navigation in their hands and those of the Holland Fen landowners. A minimum of 5 landowners and the acceptance of that complaint by the 2nd. District would be sufficient for a tunnel the size of Holland Tunnel to be rebuilt by law with the effect on the water flow in Lyme Bay as was observed by Sir Joseph the previous October.¹ It would seem certain that between the two meetings the 2nd. District Commissioners had reconsidered their situation.² There is no record as to the exact nature of the agreement referred to by Handley but it seems that, upon reflection, the District Commissioners perhaps considered that they were in danger of losing their control over Holland Fen's water supply by way of Holland Tunnel and so had ensured that they would still be able to obtain that water in the future even at the expense of the navigation. Legalising the disputed authority of the 2nd. District Commissioners over Holland Tunnel was something which the navigation supporters could not agree to.

Agreement over a Witham toll.

In the meantime the Witham Navigation Commissioners gathered at the "White Hart Hotel" in Boston and heard an application from Benjamin Handley for a toll reduction for boats travelling on the Witham to and from Sleaford between Boston and Lincoln.³ Here was the same application being made as

1 See p.54

2 This meeting may have been the first time they had seen the printed Jessop and Hudson report. Their minutes state that they received it on the 17th.

3 A single minute sheet in the handwriting of Francis Thirkill, clerk to the Commissioners, dated December 27th.1791. SGS BS 14/1/3.

was presented in 1784 and, as at that time, it was granted. In 1784 it had been realised that an encouragement of this type would be of financial advantage to the Witham Navigation itself and this would probable have been sufficient reason for agreeing to it again. There was also the additional inducement that the Sleaford supporters had expressed their willingness to consider a financial contribution to the works which would improve the water link between the Witham Navigation and the Fosdike and this may have made the Navigation Commissioners more amenable to accept the application.¹

The Witham Drainage Commissioners' recommendations.

The same venue on the same day (December 27th) was chosen by the Witham Drainage Commissioners for their consideration of the Sleaford scheme. Some time before this meeting, in fact, on December 6th., the Commissioners had instructed their surveyor, William Bonner, to inspect the proposed works on Kyme Eau and report back. They knew exactly what the proposed works were to be as Benjamin Handley had presented the Jessop and Hudson report to the meeting on the 6th. The supporters at Sleaford did not have their meeting to consider the report until over a fortnight later, on the 29th. The reason it was shown to the Witham Commissioners first was that there was no use in discussing a report with the town supporters if the Drainage Commissioners refused to accept those parts of it which related to the local drainage situation. The Commissioners' approval of it had to be obtained before any further steps could be taken in the matter.

The only points which William Bonner raised regarding the report were related to a small alteration of Kyme Eau south bank, safeguarding the angle of slope of the banks and the level of the floor of the staunch at the first lock.

¹ A similar application from the proposed Horncastle Navigation (the other partner in the Witham-Fosdike link works) was presented to the Witham Navigation Commissioners by Sir Joseph Banks on October 31st. It was allowed.

From a handwritten minute sheet¹ their deliberations seem innocent enough but things were said which were not officially recorded - at least no record has so far come to light - and only a hurried letter gives any indication of a problem. This letter was written by Thomas Fydell, a Boston banker and a Drainage Commissioner. The recipient is not indicated but it was almost certainly Sir Joseph Banks. The letter begins,

"Dear Sir,

I am just returned from the Witham meeting having, I hope, done some little good. The Commissioners of the District who were General Commissioners,² attended by their solicitor, Mr. Tunnard, offered a clause to be inserted in the Sleaford Bill which would most effectively have damned the navigation ..."

What this clause was is not at present known but it may have been that Mr. Fydell was over-reacting as no further reference appears in later documents to any "damning" clause or to any major problems arising with the General Drainage Commissioners. In fact, one of the resolutions made at the Sleaford supporters' meeting on December 29th., only two days later, was to accept the Commissioners' proposals.

The supporters' meeting of December 29th. 1791.

This meeting, held at the "Angel Inn" at Sleaford began by receiving and considering the Jessop and Hudson report, which was now being presented to them officially for the first time. This report and the accompanying estimate of costs to build the navigation were accepted.³

1 Dated December 27th. 1791. SGS BS 14/1/1.

2 2nd. District Commissioners who were also Witham Drainage Commissioners.

3 An account of this meeting is in the "Lincoln, Rutland and Stamford Mercury" of January 6th. 1792. Presentation of the Jessop and Hudson report and estimate also noted in the "Newark Herald" of January 4th. 1792.

After acknowledging acceptance also of the Witham Drainage Commissioners' resolutions the meeting went on to prepare the heads of clauses for the use of tunnels to be inserted into the intended Bill.¹ This was to cause confusion at the meeting and further opposition to the navigation in the future. The supporters saw that in order to enable the navigation to have sufficient water in which to operate, the then-existing tunnels would have to be removed, but they did not wish to deprive the landowners, particularly those of Holland Fen, of their water. They, therefore, proposed to replace Holland Tunnel with another wide enough to supply an equivalent volume of water. The remainder of the tunnels along the river were not to be radically altered.

It was agreed that the lock and staunch to be built near Drury Dyke should be under the management of the 2nd. District and North and South Kyme Commissioners but subject to the general controlling power of the Witham Drainage Commissioners. The supporters thought that they had provided sufficient security to the landowners' water but they were prepared to go further. They agreed to put a clause in the Bill which provided a power of appeal for any 10 people,² or more, to apply to the General Commissioners, who were themselves to be empowered to lay down new tunnels of almost any dimensions which they may choose. They also allowed the landowners a right of appeal against the lock-keeper of the lower lock if they thought any misconduct has taken place regarding the supply of water to Holland Fen. If the 2nd. District and North and South Kyme Commissioners found that misconduct proven, they were empowered to dismiss the lock-keeper.

1 "Heads of clauses to be inserted in the Sleaford Navigation Bill respecting the preservation of the water in Kyme Eau for the use of tunnels proposed and agreed to at a meeting held at Sleaford on December 29th.1791." SGS BS 14/1/3.

2 Qualified to, " ... 10 persons, being owners of 40 acres of land each, in the 2nd., 5th., and 6th. Districts." Witham Drainage Commissioners Minutes of January 16th.1792

Major Cartwright attended this meeting and his observations were set down in a letter to Sir Joseph Banks.¹ He admits from the start that he found no animosity at the meeting on the part of the navigation supporters towards the landowners and it seemed to him that they were really trying to be as reasonable to the landowners as they felt themselves able. In the discussion of the proposed relaying of Holland Tunnel the point was raised that if it was rebuilt at the top of the river bank instead of the bottom, where it then was, and be the proposed 9" deep, fears had been expressed that in that position it could lose much of that 9" of water through defects in the navigation works or through accidents. The Major maintained that at this point in the proceedings it had been proposed, and agreed, that in case of such an event, the tunnel should be laid lower by 6" - and here a difference arose which was not resolved concerning the authority for deciding upon the lowering of the tunnel. The supporters proposed, according to the Major, that the 2nd. District Commissioners should not carry out the alterations except under the control of the General Drainage Commissioners and then the supporters made it necessary for the landowners to prove damage to the General Commissioners in the first instance. In other words, he said, it was agreed that the tunnel should be lowered to provide more water for the landowners only after they had brought a successful claim for damages to the General Commissioners against the Sleaford Navigation. However, the landowners considered that this part of Kyme Eau banks was excepted in the general investment of the river banks in the Witham Drainage Commissioners and invested absolutely in the landowners. To resolve this situation it was suggested at the meeting that some form of arbitration might settle things but, after more discussion, nothing was agreed.

This meeting did, though, make the decision to limit the dividend rate to shareholders to 8%² and it also ordered that the heads of clauses for the

1 Letter dated, January 1st. 1792. SGS B5 14/1/1.

2 Mentioned in the "Lincoln, Rutland and Stamford Mercury" report of January 6th. 1792.

Bill be prepared and those parts of it which concerned the Witham Navigation, the Witham Drainage or the District Drainage Commissioners, be sent to their respective clerks before the Bill was printed.

The Witham Drainage Commissioners' consideration of the heads of clauses.

The prepared clauses were considered by these Commissioners at their meeting of January 16th, 1792, held at Boston's "Peacock Inn".¹ Although Benjamin Handley attended the meeting he does not seem to have prepared an account of the proceedings for transmission to Sir Joseph, which is unfortunate as the Commissioners' minutes do not actually state what these prepared clauses were. In fact, there is no documentary evidence as to the precise nature of these clauses at all. Those that were later to form part of the Bill would have been those which the various Commissioners for Drainage insisted upon and also original clauses submitted by the Sleaford supporters which may or may not have been in an unmodified form by the time they were printed in a Bill. What additional minor alterations were made to individual clauses are, therefore, impossible to state.

Of prime importance was the obtaining of the Commissioners' agreement to new dimensions for Holland Tunnel of 9" deep and 49" wide, with the bottom 9" below the top of the staunch to be erected above Drury Dyke.² The control of all tunnels through Kyme Eau banks was to remain with the Commissioners although the expense of laying new ones was to rest with the navigation. This control was vital to the Drainage Commissioners for to lose it would make the continuance of their function in that area impossible.

The 1792 Bill enters Parliament.

With the Witham Drainage Commissioners' meeting of January 16th, 1792

1 Handwritten sheets, being copies of the minute. SGS BS 14/1/1.

2 See Appendix C, 3. showing maximum possible water height in relation to the tunnel entrance.

the records fall silent for about 10 weeks. Agreement about all the clauses of the Bill may have been obtained with each of the main parties involved although this is not definitely known. What is certain is that on February 9th. Benjamin Handley and Benjamin Cheales gave a copy of the Bill's clauses relating to the Witham Drainage Commissioners to them.¹

There was one group at least with whom no agreement had been reached but the Sleaford promoters presented the petition for leave to bring in a Bill into the House of Commons on March 1st. 1792.²

The petition was ordered to be referred to a Committee. Two figures from the 1784 attempts for an Act reappear, for the Committee was placed under Sir John Thorold and Mr. Anderson Pelham.

Four days later (March 5th.) Sir John reported back to the House and the records briefly note that William Jessop had been called to give evidence. The House gave leave to bring in a Bill and Sir John and Mr. Pelham were instructed to prepare and introduce it.³

It is of interest to note that immediately after finishing with the Sleaford Navigation Bill that day the House went on to consider the petition to introduce the Bill of Sleaford's neighbour, the Horncastle Navigation.

On March 9th. Sir John presented the Sleaford Bill to the House and it received its First Reading.⁴

Back in Lincolnshire the opposition was organising. It had been recorded at the 2nd. District Commissioners' meeting of December 17th. 1791 that the Holland Fen landowners intended to go to London to petition against the Bill. This train of events was taken up again when, in March 21st. 1792,

1 Final agreement to the Bill was given by them on March 6th. Witham Drainage Commissioners' Minutes, 1789-1803. Lincoln Archives.

2 House of Commons Journal, vol.47, p.465. HLRO

3 Ibid, p.493.

4 Ibid, p.527.

the 2nd. District Commissioners instructed their clerk, Samuel Tunnard, to attend the meeting of the landowners at the St. Alban's Tavern in St. Alban's Street, London, on the following day (March 26th.) as it was the Commissioners' intention to aid the petitioners in their case.

During his time in London Samuel Tunnard was in contact with the Sleaford supporters - contact which proved to be fruitless in achieving the ends he sought, as was revealed in his letter of report to the Commissioners. -

"Gentlemen,

In obedience to your order I attended the meeting of the proprietors of Estates in Holland Fen at the St. Albans Tavern with the Book¹ and other Papers relating to the District.

I am sorry to inform you that the Proprietors of the Sleaford Navigation would not admit of any alteration being made in their Bill and resolved that the Committee should sit from tomorrow at two o'clock.

At the request of some of the Proprietors I have this day delivered the Petition against the Bill to Mr. Vynar, who will present the same to the House, that the Proprietors may be permitted to offer such clauses as they may think proper at the Committee.

I am, gentlemen, etc,

Sam. Tunnard.²

The petition of the supporters.

The Committee Stage began on the next day, March 27th., as Tunnard had said in his letter.³ At this time the petition of the landowners of Holland

1 Meaning the Minute Book.

2 Copy of a letter in the 2nd. District Minutes for March 28th. 1792.

3 House of Commons Journal, vol. 47, p. 603.

Fen and the 11 towns of Holland against the Bill was introduced. Here was one of the groups with whom agreement about the clauses of the Bill could not be reached. It was ordered to be referred to the consideration of the Committee and that the petitioners should be allowed counsel at their appearance. It was also ordered that counsel in favour of the Bill should be heard at the same time.

At this hearing a document would have been produced in evidence which the supporters had prepared to counter the arguments of the opposition.¹ It is probable that this document, which existed in printed form, had been circulated earlier in the Sleaford district for the information of the local inhabitants. In the main the arguments contained within it were directed at the landowners of Holland Fen and their contentions regarding Holland Tunnel and its waters.

First, the promoters of the Bill did not believe that the tunnel had "immemorially" (a term originally used by the landowners in their petition) been engaged for the purpose of watering cattle but had originally been put down by permission of the Court of Sewers, a court which possessed no legal powers to divert or use the water for any other purpose than that of drainage. Further, there was the King's Bench Plea of 1377 which admitted the right of navigation on Kyme Eau and which, as far as "parol" evidence³ could prove, had been used uninterruptedly by small vessels ever since.

Second, in answer to the charge that altering the level of Holland Tunnel would deprive the fen of part of the water to which the landowners felt they had title, a staunch was proposed to be erected just below the tunnel which would equal the height of the crown of the tunnel, so no water could pass down the river and go to waste unless the tunnel was full. It is worthy

1 "The case in support of the Bill in answer to ... etc.", dated, 1792.

SGS BS 14/1/3.

2 See p.4.

3 By word of mouth.

of note that of the 14 tunnels through Kyme Eau banks which were held under the same right, claiming the same authority and all of which were to undergo similar alterations, Holland Tunnel was the only one concerning which any complaint had been made. The supporters observed that the objection was, anyway, limited to only a minority of the landowners,

" ... nearly all the landowners interested in that tunnel, and most interested in all the others, have not seen fit to oppose the Bill."

Third, regarding the alleged possibility of the usurption of the supervisory powers over Holland Tunnel claimed by the objectors to be invested in the Witham Drainage Commissioners, the petition assured that there could be no thought of altering the investment - there was no attempt to do so in the Bill - especially as the supporters felt that these powers had been carried out well in the past.

Finally, it was asserted that the owners of lands and mills on the line of the navigation had approved the Bill.

The Committee Stage was reported on April 3rd.¹ at which time Sir John Thorold noted that the Committee had made amendments to the Bill and that others were still needed. The House resolved that the Bill should be recommitted to the Committee.

The Journal of the House of Commons makes no further mention of this stage of the proceedings of the Bill through the House and the record is taken up again when the Bill was introduced into the House of Lords.² Things must have gone satisfactorily for the promoters for the Bill to have got this far. In the three previous attempts for an Act they had not!

1 House of Commons Journal, vol.47, p.680. HLRO

2 House of Lords Journal, vol.39, p.366. HLRO (on April 24th.1792)

The 1792 Bill in the House of Lords.

The Bill's introduction into the House of Lords and its First Reading occurred on April 24th, 1792. On the following day it was committed to the consideration of a Committee to consist of all, or any 5, of the following peers, - the Dukes of Ancaster and Kesteven, and of Portland; the Earls Kellie and Lauderdale and the Lord Steward, together with Lords de Clifford, Cathcart, King and Scarsdale. The Committee was concluded with the inclusion of the Lord Bishop of Carlisle.¹

Whether any influence had been used behind the scenes to ensure that the Duke of Ancaster and Kesteven was on the Committee is, of course, not recorded but, at the very least, a navigation would have proved useful to him as his estates lay only a few miles to the west of Sleaford.

On May 2nd, the general petition against the Bill was introduced into the House of Lords and this document allows us, for the first time, to know those who were actively opposed. This opposition came entirely from Holland Fen and the general area to the east of Sleaford. It is interesting to note that of the 173 signatories to the petition, eight were 2nd. District Commissioners.

At the same time, three petitions in favour of the undertaking were also submitted; that of, "several noblemen and others, owners of estates in Holland Fen (7 signatures); that of, "owners and occupiers of lowlands in the parishes of South Kyme, Heckington, Ewerby, Asgarby and Howell" (96 signatures) and that of, "occupiers of lowlands in the parishes of South Kyme, Anwick, North Kyme and Ruskington" (119 signatures)². All these were referred to the Committee.

The following day a fourth petition in favour was presented, this time from, "the Mayor of Boston ... and several persons, being owners and occupiers of lands in Holland Fen." (51 signatures)³. This made a total of

1 House of Lords Journal, vol.39, p.368.

2 Ibid. p.385.

3 Ibid. p.389.

273 signatures had been subscribed in favour of a navigation and 173 against.

The House of Lords' Committee Proceedings.

The House of Lords Committee met for the first time on May 3rd, 1792 to consider the Sleaford Navigation Bill and Lord Cathcart took the Chair.¹ On this first day the supporters were represented by two counsel, a Mr. Douglas and a Mr. Sutton while the petitioners against certain of the clauses in the Bill were represented by a Mr. Richards.

The consideration of the Bill began with the reading of the first two enacting clauses, which were agreed to. The third enacting clause was opposed by Mr. Richards, who proposed an amendment. The offending clause dealt with the bridges which the Navigation were to be empowered to alter or control over the river, one of which was in Dogdyke parish and which led from Holland Fen northwards across the river.

The amendment as presented was an attempt to take the power of authority over this one bridge away from the Navigation, but why only in this one location? Some explanation may possibly be found in the cross-examination of Francis York, the Holland Fen landowners' agent and 2nd. District surveyor. He was determined to give nothing away and, when examined by Mr. Richards, the evasive answer he gave to the question,

"To whom do the lands at each side of the bridge belong?"

was,

"On the south side it is a highway leading to the bridge and the north side is a highway leading to the said bridge."

However, the next two questions and answers were more straightforward,

"Who are the landowners belonging to each side of the bridge?"

¹ "Copy evidence taken before the Committee of the House of Lords".

SGS BS 14/5. Also, "Reports of the Committees of the House of Lords" for 1792. HLRO.

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"I don't know."

"Are these persons, whoever they are, landowners in Holland Fen?"

"Yes."

Here is a possible clue. As the land on the north side of the bridge was under the ownership of those living to the south, they would wish to control their means of access. So, this was an amendment possibly introduced by the landowners. The building and maintenance of the bridge could have an effect upon the stability of the river banks, a responsibility of the Witham Drainage Commissioners and, when asked whether they had been applied to for their consent to this proposed clause addition, Francis York replied that he did not know. The point was taken up by the supporters' counsel for he enquired the number of Sleaford Navigation proprietors who were also drainage commissioners. The answer was four. This was sufficient for the Committee. They were probably not prepared to see responsibility for any structures, the deterioration of which could jeopardize powers already granted by the Witham Act, pass into the hands of individuals - rather it should remain with corporate bodies. The amendment was defeated.

The fourth enacting clause was then read, which dealt with the control which the Drainage Commissioners were to maintain over the south bank of Kyme Eau below South Kyme and the north bank between South Kyme and Kyme Ferry Bridge. It also dealt with the dimensions of these banks and the making of soke dykes. Mr. Richards put forward an amendment which laid down specific conditions for the maintenance and repair of these banks.

This was one of the critical amendments in the objectors' case - they did not want to lose their water rights from Kyme Eau but they also did not wish to be endangered by any weakening of that river's banks and they had stated this in their petition to Parliament.

The argument was of a technical nature and each side had its expert. The opposition was championed by James Creassy¹, the originator of the

¹ His name is given as Daniel Creassy in the Lords' Committee Report.

1774 scheme and the supporters were represented by William Jessop.¹

James Creassy was called first. He gave some information concerning his background and interest in Kyme Eau, mentioning that he had known the river for 40 years, and that it was he who had been responsible for the construction of the river banks as they then were. At that time they stood 10' high and were 6' wide at the top which was, in his opinion, too narrow for haling without the possibility of breaking down the bank and endangering the surrounding country. As he saw it, the danger would be especially acute above the lowest lock to be built (i.e. the northern boundary of Holland Fen) as there the water level would be above the general surface of the land, that is, the Navigation would be elevated. An advantage which he noted would result if the river was not elevated was that the deepening of the river would produce sufficient dredged material to make the banks fit for haling and so help secure the lands from possible future inundations.

It was his opinion that the amendment would be an absolute necessity to secure the banks as,

"I made the banks and therefore speak from my own knowledge. It was constructed upon a bog and is made of clay and other soft materials. That unless additional quantities of earth are laid upon it those soft materials will be constantly wearing away tearing down by horses haling thereon."

Creassy was then asked to say what would be the specific consequences to Holland Fen if the south bank was not made secure. He foresaw that if a breach occurred at a time of flood all the area between the river and the South 40 Foot Drain would be drowned, an area of about 60 square miles.²

¹ His name is given as Richard Jessop in the Lords' Committee Report.

² He actually stated, " ... the length might be about 11 miles and the breadth about 5 or 6."

William Jessop was then called and examined by Mr. Douglas. Immediately a direct conflict of opinions was seen as Jessop was entirely convinced that the Bill gave sufficient protection to Holland Fen and that, with the proposed widening and deepening of the river, not only would the earth to be removed be enough to enable haling to take place safely but also the water would flow more freely and so put the banks under less pressure. He was then cross-examined by Mr. Richards, who may have tried to give the impression to the Committee that Jessop was not as acceptable a witness as James Creassy because he did not live in, and intimately know, the country around Holland Fen.

The amendment was then voted and was defeated. With that the proceedings were adjourned to the following Wednesday, May 9th.

The business of the next sitting went quite smoothly. The 5th. to 12th. enacting clauses were read and agreed, with only an agreed omission of four words made in the 10th. clause.

There would probably have been time that day to continue with the Bill's examination but, in view of the nature of the 13th. enacting clause, it was more likely decided to adjourn until the next morning in order to allow sufficient time to deal with that clause in one day -- for the 13th. clause was the one dealing with the tunnels and the modifications to Holland Tunnel in particular.

The 13th. enacting clause.

Lord Cathcart was again in the Chair when counsel were called in on that Thursday morning. The 13th. enacting clause was read, which dealt primarily with the replacement of the 21"-square Holland Tunnel with one 9" deep and 4'1" wide.

The first person examined was James Creassy. His examiner was a Mr. Ainsley, acting on behalf of the opposition.

Questioning began with asking about the authority responsible for Holland Tunnel. Creassy said that this was claimed by the Witham General Drainage Commissioners, a claim, he maintained, denied by the Holland Fen landowners. However, he knew of repairs to it which had

been made since the passing of the Witham Act, in 1764 and 1767, and then the General Commissioners' surveyor had deepened Kymo Eau and the 2nd.District's surveyor had relaid the tunnel. When questioned about the amount of water which would be lost to Holland Fen if a tunnel of the new dimensions was built he strongly asserted that it would supply more than one-third less than the present tunnel gave.¹

The next witness to be called was Francis York. The first question put by Mr. Richards was an attempt to establish the currently-accepted authority over the tunnel -

"Question - By whom has the tunnel been usually repaired since the passing of the Witham Act?

Answer - By order of the 2nd.District Commissioners.

Question - How do you know that?

Answer - I am the surveyor of the 2nd.District and have repaired it by order of the Committee of the 2nd.District several times."

The supply deficiencies of the present tunnel were then investigated and Francis York explained that, as agent for some of the proprietors of Holland Fen, he knew there to be a deficiency in dry seasons - the tunnel producing only about half the amount required by the cattle on the Fen and, in his opinion, with an insufficiency of water for land-watering

¹ See Appendix C, 4.

In his cross-examination by Mr. Douglas, Creassy mentions the lack of a claim by the 2nd.District over the tunnel:

"Question - In what parish in Holland Fen is the tunnel situated?

Answer - I believe in South Kymo. It is not within the limits of the 2nd.District.

Question - Have the Commissioners of the District you mentioned any jurisdiction except under the Witham Act?

Answer - I believe not."

a navigation could continue to operate.

The adjournment was then called, with the next sitting to commence at 11 o'clock the following Tuesday morning, May 15th.

From this distance in time it is really impossible to obtain a clear idea of the behind-the-scenes conflicts which may have been going on, or the general feeling within the Committee Room as to the progress and possible success, or otherwise, of this Bill. The reports of each day's sitting do not convey this tension but, with the ending of this third day of examination, to some people at least it did not seem that the Bill would succeed.

Probably shortly after this day's business, Mr. Clitherow, the solicitor for the Horncastle Navigation Bill, wrote to the Witham Navigation Commissioners. This was an interesting communication as not only does it give an impression of the progress being made in London but it also shows that agreement had been reached regarding the financing of the proposed link between the Witham and Fosdike Navigations, through the High Bridge at Lincoln, first mentioned by Sir Joseph Banks the previous December. The actual letter written by Mr. Clitherow has not survived but its general tenor is recorded in the Witham Navigation Minutes for May 15th. 1792, taken at a meeting held at the "Peacock Inn", Boston,

"A letter from Mr. Clitherow ... having been produced stating the probability¹ that a Bill for making a navigable canal from Sleaford to the River Witham may, from the opposition made against it, be lost in the present session of Parliament, and proposing if that shall be the case that the charge for the works from Stamp-End to the High Bridge in Lincoln should be at the joint expense of this Trust and the proprietors of the Navigation to Horncastle, It is therefore resolved that this Trust do consent, provided the Bill for

¹ Author's emphasis.

making the said navigable canal from Sleaford to the River Witham should not pass into law, to share with that for forming the said Horncastle Navigation in the expense of the works from Stamp End to the said High Bridge in Lincoln provided also that the proprietors of the said Horncastle Navigation to be jointly charged with the perpetual maintenance as well as the erection of the said works."

Sir Joseph Banks, though, would seem to be one of the participants who was not expecting defeat for, as well as putting forward counter-arguments to the opposition,¹ he was also planning what to do about that opposition when the Sleaford Navigation became a reality, so confident was he of the outcome.² One such counter he noted was against the claims of the Holland Fen landowners. Creassy had said that before the passing of the Witham Act, Holland Tunnel had been under the jurisdiction of the Court of Sewers, a former jurisdiction which all sides acknowledged. He would have been in a very good position to substantiate this as his father-in-law had been an Officer of Sewers. One of the supporters' counsel, Mr. Douglas, had told Sir Joseph, that just by the tunnel having been under the jurisdiction of the Court of Sewers was sufficient,

"to do away all claims to a "prescriptive" right of jurisdiction in any other person."

Even so, there must have been an air of gloom amongst the majority of the Bill's promoters when the Committee reconvened on May 15th. However, it was now the turn of the supporters to put their case and their first

1 "Argument of counsel in the House of Lords" - undated but must be later than May 15th, 1792 as it includes observations on John Hudson's evidence of that day. SGS BS 14/5.

2 "General Observations on the Present State of Dampford Tunnel", dated May 10th, 1792. SGS BS 14/1/2.

witness was John Hudson, the joint-engineer of the proposed works. He argued that Holland Tunnel would not suffer in any way from the eleven other tunnels upstream from it. The declivity between it and the furthest tunnel upstream would never be more than 2" in the dry season and the amount of water to be taken from the river due to the working of the locks would be small.¹ When asked whether there would be enough water to supply Holland Tunnel and the other tunnels, he replied,

"Certainly, ten times as much."

When asked directly if the proposed alterations would supply more water in dry seasons than the present arrangement, he again replied affirmatively.

His cross-examination by Mr. Richards was brief and, after a few questions relating to supplying water to the higher parts of Holland Men, William Jessop was again called.

In a brief examination the main point he made was,

"...as in the present situation of the river there is a declivity in the surface of the water of $\frac{1}{2}$ " in one mile [✓] when Holland Tunnel discharges only a quantity proportional to the depth of 9 or 10 inches,² all the other tunnels must run almost full. They therefore at present have a considerable advantage from their situation over Holland Tunnel ... the smaller tunnels will lose a considerable part of the advantage they now have and what they lose the Holland Tunnel must gain."

1 "Question - How many locks-full will it [the river] run in a day?

Answer - About 200.

Question - How many do you calculate may be wanted for the navigation?

Answer - I calculate them as 2, and 1 for leakage.

2 See Appendix C, 5.

The examination of William Jessop continued the next day. The Chairmanship of the Committee was now taken by the Duke of Ancaster and Kesteven, Lord Cathcart having stepped down.

Mr. Ainsley questioned Jessop on the water supplies to Holland Tunnel but all the answers he gave further reinforced his view that the tunnel would not suffer.

This view was supported by the next witness, Sir Joseph Banks. His opinion was needed as, being one of the Witham Drainage Commissioners, he should have been able to supply authoritative evidence on drainage matters. Like Jessop, his replies maintained that only an advantage in water supply would come to Holland Fen by the suggested proposals.

Mr. Sutton then called Mr. Joseph Newman, one of the Holland Fen landowners. It was his opinion that the proposed works could only aid the drainage of Holland Fen, not endanger it. Mr. Richards, in cross-examination, attempted to discredit the answers Mr. Newman had given by making him reveal a possible bias when he was forced to admit that he was the Treasurer to the General Drainage Commissioners. However, one of the Committee members intervened immediately to ask if he happened to know what were the general sentiments of the proprietors of Holland Fen with respect to the Bill. He replied,

"I believe a great majority for it."

Joseph Newman's evidence was the last to be taken on the 13th. clause and ended the business of that day. The Committee adjourned until Monday, May 21st, at 11. a.m., at which time, quite simply, the records note that the 13th. to 17th. enacting clauses were read and agreed. Without additional evidence being found it would be impossible to say exactly what had happened although it would seem that, contrary to the general feeling of May 15th., the Committee had decided to accept the evidence given by Jessop, Hudson and others that Holland Tunnel's water supply would be effectively secured under the terms of the Bill.

Royal Assent

Events then moved swiftly. On May 22nd. the Duke of Ancaster and Kesteven reported the Bill.¹ It received its Second Reading and was agreed by the House. The Third Reading was on May 25rd.² and, after the agreement, it was sent back to the Commons where, on the 24th.³ the Bill was again agreed to. Lord Sheffield was ordered to,

"... carry the Bill to the Lords and acquaint them of the House of Common's agreement."⁴

The culmination of 19 years' effort occurred on June 11th.1792 when the Royal Assent was given to the Bill and the "Sleaford Navigation Act" became law.⁵

1 House of Lords Journal, vol.39, p.436.

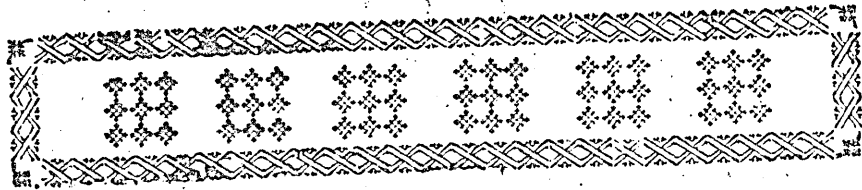
2 Ibid. p.438

3 House of Commons Journal, vol.47, p.825.

4 House of Lords Journal, vol.39, p.443.

5 House of Commons Journal, vol.47, p.1070. The official title of the Act was, "An Act for making and maintaining a navigation from Sleaford Castle Causeway, through the town of Sleaford, in the County of Lincoln, along the course of Sleaford Mill Stream and Kyme Eau, to the River Witham, at or near Chappel Hill, in the same county, and for making necessary cuts for better effecting the said navigation." 32 Geo 111, cap. 106.

The "Lincolnshire, Rutland and Stamford Mercury" of June 1st.1792 reported, "On Tuesday (29th. May) great rejoicings in Sleaford in consequence of the Canal Bill having passed both Houses of Parliament." See also "Lincolnshire, Rutland and Stamford Mercury" for June 15th.1792 and the "Newark Herald for June 20th.1792.



A N
A C T 1792
F O R

W. 1792 III. c. 106

Making and Maintaining a Navigation from *Sleaford Castle Causeway*, through the Town of *Sleaford*, in the County of *Lincoln*, along the Course of *Sleaford Mill Stream* and *Kyme Eau*, to the River *Witham*, at or near *Chappel Hill*, in the same County, and for making necessary Cuts for better effecting the said Navigation.

WHEREAS the making and maintaining of a Navigation for the Passage of Boats, Barges, and other Vessels from a Place called *Sleaford Castle Causeway*, in the Parish of *New Sleaford*, through the Town of *Sleaford*, along the Course of *Sleaford Mill Stream* and *Kyme Eau*, to the River *Witham*, at or near *Chappel Hill*, all in the County of *Lincoln*, will open a Communication with the Port of *Boston*, the City of *Lincoln*, and the River *Trent*, whereby the Carriage of Coals, Corn, Wool, and other Goods and Commodities will be greatly facilitated, and in other Respects the said Navigation will be highly beneficial to the Country adjacent thereto, and be of public Utility:

Preamble.

And whereas the several Persons hereinafter named are desirous, at their own proper Costs and Charges, to make and maintain the said Navigation, but cannot effect the same without the Aid and Authority of Parliament;

A May
Title page of the *Sleaford Navigation Act, 1792.*

Fig. 6

The Act of 1792

Much of the Sleaford Navigation Act had clauses which were common to most Navigation and Canal Acts and, therefore, only those aspects which were peculiar to this undertaking will be considered.

After stating the names of the then shareholders the Act gives a summary of the route which the Navigation was to take. It was to run from Chapel Hill ("Chappel", in the Act) on the River Witham to Sleaford Castle Causeway, a roadway on the western side of Sleaford town. (2)¹

The Act mentioned that Kyme Eau and the Sleaford Mill Stream should be deepened sufficiently so as to allow at least 4'9" more depth of water at the tail of the second lock than there then was - a fact which does not appear in the printed copy of the Jessop and Hudson report. Also, the Act slightly modified the dimensions of the Navigation as stated in the survey between the Witham and Haverholme Mill - it was to be 18' wide at the bottom, 30' wide at the surface and 4' deep (c.f. survey measurements of 18' at the bottom and 28' at the surface.)

The positions of the locks to be built corresponded with those given in the Jessop and Hudson survey² and their dimensions were to be 60' long within the doors and to have 15' clear waterway. Staunches were to be erected at each of the two lower locks, at least 20' wide and rising to a height of at least 4' above the upper sill of their respective locks (2)

The company was empowered to rebuild, demolish or alter the Town Bridge and Beffries Bridge, both in South Kyme, the bridge at South Kyme Ferry, the one near the Old Mill on the Mill Stream, at Bates

1 Numbers in parenthesis refer to the clauses' number in the Act.

2 Six locks were constructed on the Mill Stream near each of the mills, c.f. the Jessop and Hudson survey, see p.60.

Fen in Sleaford and the South Bridge there also. They were also to have the power to act in a similar fashion over any other bridge where it was found to hinder or obstruct the making or use of the navigation. As the existing fords would become impassable with the raising of the water level and the bridges near these places would, thereby, become relatively lower, the bridge at Haverholme ford could be removed. The bridge at the ford from Haverholme to Dwerby was to be rebuilt to take carriages, as were those from South Kyme to Five Willow Wath and at each of the mills on the Mill Stream. Horse and footbridges were to be erected in North and South Kyme and Dogdyke.

As was agreed early in January, 1792, the 2nd. District Commissioners and those for North and South Kyme were given the authority over the first, or lowest, lock. The lock-keeper, although appointed by the company, had to carry out the orders and directions of those Commissioners with regard to opening and closing the doors of the lock and drawing the slackers of the staunch by its side (16) and could be dismissed by them under certain circumstances (19). If at any time either this lock or its staunch should be out of repair and allowing water to run from Kyme Eau into the Witham unchecked, the District Commissioners had a right to erect a moveable staunch above this first lock, so preserving the powers they had under the Witham Act (17).

The powers granted to the District Commissioners over the first lock might have allowed an absolute power to develop over this lock as was seen in the 1784 Bill, particularly as Clause 20 repeated the "liberty at all times" section of that Bill. The objections to it, thought, were overcome with a change in the wording regarding the nature of the control which the District Commissioners were to have over the lock.¹

¹ Very specific circumstances were laid down when their control would become effective. Further, they were only allowed directly to impede traffic when it was necessary to put down the moveable staunch authorized in Clause 17.

Work on the Navigation's construction was to begin from the Witham end and proceed upstream. At the Sleaford end it was permissible to make the back-drains of the town navigable in order to bring goods to the waterway (22).

The Act dealt with tolls in two parts. First, there was the reduction made to the Witham toll on any goods carried on the Witham to or from any part of the Sleaford Navigation above the first lock. These goods were liable to only half-toll, then standing at 1/6d. per ton (23)¹. The second part of toll details (65) related to the rates which the Sleaford itself was allowed to collect. These were as follows,

At 2/- per ton:

- a. Between Sleaford Castle Causeway and Haverholme Mill.
- b. From above Haverholme Mill to any distance downriver as far as the Witham.
- c. From the Witham, or as far upstream as Haverholme Mill, to above Haverholme Mill.

At 1/6d. per ton:

- a. From between Haverholme Mill and the 2nd. lock at Flax Dike to below the 2nd. lock as far as the Witham.
- b. From anywhere below the 2nd. lock to between the 2nd. lock and Haverholme Mill.

¹ Nowhere in the Act is this toll reduction said to have been granted due to the promised financial assistance with the Witham-Fosdike link c.f. the Horncastle Act (32 Geo.111.cap.107). The only reason given was that, " ... whereas the Navigation intended by this Act will tend very much to increase the Tolls and Duties granted by the said recited Act [viz. the Witham Act] and be of great Benefit and Advantage to the Mortgagees and Annuitants therein named ..."

Sleaford Navigation Act, 1792. p.16, l.25-8.

At 1/3d. per ton:

- a. From between the 2nd. lock and Beffreys Bridge in South Kyme to below that bridge as far as the Witham.
- b. From anywhere below Beffreys Bridge to between that bridge and the 2nd. lock.

At 1/- per ton:

- a. From between Beffreys Bridge and the 1st. lock to below that lock as far as the Witham.
- b. From anywhere below the 1st. lock to between that lock and Beffreys Bridge.

Half-toll was allowed on lime, limestone, manure for agriculture and roading materials.

Obligations were placed upon the millers to preserve water for the Navigation. Any occupier of a mill who removed more water than would reduce the surface level of the stream above that mill by one foot was liable to a 40/- fine, payable to the company (87). On the other hand, the company had to maintain the floodgate put down at Cogglesford Mill (88) and put down staunches whenever a miller needed to drain the millpond supplying him in order to carry out repairs to his mill (89).

The day-to-day organisation and running of the company was to be in the charge of a group known as the "Committee of the Company of Proprietors of the Sleaford Navigation". The Act placed no limit on the number of members who could be elected to this committee but they had to meet certain financial requirements. Each individual must, in his own right or that of his wife, have held a freehold or copyhold estate with a rateable value to £50 a year or a personal estate of a clear £1,000 after the repayment of any debts. This financial requirement was waived if the prospective member was the eldest son of a peer or a person qualified to be elected and serve as a "Knight of a Shire" in England. In the unlikely event of anyone being elected to the committee who did not meet these conditions, a fine of £50 could be imposed upon them (61).

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The record of the committee's meetings were to be taken by the company clerk, but he was not to be a member of the committee (59).

Membership of the committee did not prevent external appointments being taken up and, indeed, at that time the qualifications demanded of members would almost certainly ensure that they would be leading figures in the local community. Committee members could, for example, be appointed J.P's, although they would have to declare their interests if a case was brought before them which demanded this. (61)

The shareholders, known as "The Company of Proprietors", were allowed to raise and contribute amongst themselves any money needed to make and complete the works up to a total sum of £13,000. This amount was to be obtained by the issuing of shares up to a value of £100 each. A subscriber would not become eligible for voting rights or the receipt of a dividend, or part of one, until a full share was owned (43). The shares were transferable and the possessor was entitled to receive $\frac{1}{150}$ th. of all the dividend profits for each full share owned. (44).

If it was found that the originally authorised £13,000 was insufficient to complete the works, the shareholders could either contribute amongst themselves or admit new shareholders on mortgage the tolls, up to a limit of a further £6,500,¹ so bringing the total capital authorised by the Act to £19,500.

The first Annual General Meeting of the shareholders was instructed by the Act to be held in the house of Edward Bates in New Sleaford 3 weeks after the commencement of the Act. At this meeting the Committee of Proprietors was to be appointed, of not less than 5 and not more than 7 shareholders, their tenure to be one year. The first officers to be appointed were to be the treasurer and clerk who were receive fixed salaries. The committee could appoint other officers as

¹ Stated incorrectly as "£10,000" in Phillips' "General History of Inland Navigation" 5th. Ed. 1805, p.281 (David & Charles reprint, 1970)

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they were needed, in a paid or voluntary capacity. The committee was also noted as being subordinate to the general meeting, under whose direction and control it had to operate and to whom it had to report (50). This committee was to be elected annually at the Annual General Meeting which was to be held on the first Tuesday in May.

Why the Sleaford Act was passed in 1792

With the passing of the Act an established fact it is worth considering why, after the failures of the past, success should have been achieved in 1792. Although there were a total of four Bills presented to Parliament between 1774 and 1792 only the last two, the second Bill of 1784 and that of 1792, need be studied as their outcomes depended, more than the other two, on the same set of conditions differing both nationally and locally.

The Bill of 1774 was submitted to Parliament at a time when the principal link with the sea and the centre of England, the River Witham, was itself not a certain navigation and the first Bill of 1784 was withdrawn due to a technicality.

From the local point of view the second 1784 Bill was defeated due to the arguments put forward by the Holland Fen landowners and the 2nd. District Commissioners regarding the water supply to the fen via Holland Tunnel. In 1792 the argument, although the same, was rejected by Parliament. The reasons for this could be many but, simply, each sides' argument about discharges from the old, compared with the proposed, tunnel contradicted one another. The Lords Committee had to choose and they decided in favour of William Jessop. With the evidence available to them the Committee's choice would seem to have been based on whom they were more inclined to believe, William Jessop or James Creassy. Although Creassy may have been a competent engineer as far as Lincolnshire was concerned he did not possess the national prestige of Jessop. A pupil of Smeaton, he had been engaged on many canal projects and had obtained a reputation for making sound engineering judgements.

He would also not have been an unknown figure in Parliament as he would have attended there many times.¹ With this opposition, James Croassy would have been fortunate in having his arguments accepted.

Another factor to be considered when accounting for the success of the Bill was the altered position of the 2nd. District Commissioners who had opposed in 1784 using their authority over Holland Tunnel as a basis. This authority was invalidated in 1792 when it was realised that, being in South Kyme parish, the tunnel was the responsibility of the 6th. District. This must have been a major blow to the objectors' case when the position of the one corporate body they had in support was undermined. The importance of this change of status can be estimated from the fact that this change in the District's status was the only alteration in the position adopted by any of the corporate bodies involved. For example, once the safeguards to their authority had been established, the Witham Drainage Commissioners and those for Navigation, were in support of a Sleaford Navigation in both 1784 and 1792.

This leads on to the individual support which the Bill received and, of great significance here, must be the patronage given by Sir Joseph Banks. Not only was he acting as a representative of the Drainage Commissioners but he was also President of the Royal Society and an extremely influential figure at Court. He had the ear of King George III and any project with which he was connected must have been regarded very highly by a great number of the peers in the House of Lords.

¹ In a letter to Sir Joseph Banks, William Jessop wrote, "I have, therefore, for some years past, never further engaged in any undertaking at the outset of it than to investigate the practicality, and to attend the Bill through Parliament; In ten Bills now bringing forward I shall stand exactly in ~~this~~ predicament." Dated, "Newark, January 28th. 1795." MSS BS 18.

He was active during the 1784 proceedings but he took a principal part in promoting the scheme from 1791 onwards. His influence behind the scenes could have been crucial and may explain the optimism he displayed on May 15th. 1792 (see p.87) when the general opinion seemed to be that the Bill would fail.

There was a second individual whose presence may have influenced the outcome in 1792 and that was the Chairman of the House of Lords' Committee. For most of the proceedings this had been Lord Cathcart and then, for the final two days, the Duke of Ancaster and Kesteven assumed this position. The Duke's estates lay immediately to the west of Sleaford and, as well as arable grain land, contained a number of limestone quarries at Ancaster and Wilsford which provided high-quality building and facing stone. A navigation near to this area would have been of direct financial benefit to the Duke as it could be anticipated that it would provide quick, easy and cheap transportation for these bulk goods which would otherwise have gone by land carriage. While there is no direct evidence to suggest that the Duke influenced the Committee in any improper way, one is left with the feeling that, with the whole of the House of Lords to choose from, and also the other members of the Committee, why was he chosen to Chair the proceedings on an undertaking which might have been of financial benefit to him personally? A counter to this speculation is that the opposition made no objection to him taking the Chair or, if they did, it was not recorded.

On a national level, 1792 was a "better" time to make application to Parliament for a Canal or Navigation Act and have a good chance of success. The Sleaford Navigation was a forerunner of the "Canal Mania" period which reached its height in late 1792 and early 1793. In a letter written by Sir Joseph Banks to Richard Clitherow, the clerk to the Horncastle Navigation, seven months after the Sleaford Act became law, some idea of the growth in the number of canal Acts

can be gained,

" ... half the canals that passed the House last year are at a stand for want of proper persons to conduct them and 40 more are now before the House, some of great magnitude."¹

In 1792 the Sleaford Navigation Act was just one of eight canal Acts passed and it was one of six such Acts to receive the Royal Assent on June 11th.² It was within this general climate of anticipated success that the Act was applied for and passed. This climate did not exist to anything like the same degree eight years earlier.

A final consideration involves two speculations. The negotiations for an Act had begun in 1791 and it would be interesting to speculate the effect that the French Revolution had on the success of the Bill.

1 Sir Joseph is incorrect. The only canal which obtained its Act in 1792 and was "at a stand" was the Horncastle! However, this statement was prophetic in that it could have been applied to those Acts passed in 1795. Letter dated, February 22nd, 1793. SGS BS 18/9

2 Other June 11th. Acts were-

- i) From Combe Hill to the River Severn in Gloucestershire,
- ii) Kirkby Kendal to West Houghton in Westmoreland,
- iii) Pentnewynydd to Newport in South Wales,
- iv) Manchester to Ashton-under-Lyne and Oldham,
- v) Improving and enlarging the Tattershall Canal - the Horncastle Navigation.

In addition, the Nottingham Canal Act and the Wyrley and Essington Canal Act also became law in 1792. A ninth also passed but it was a "supplementary" relating to the Upper Medway Navigation.

In 1784 there was no hint of any possible future disruption of coastal shipping due to a European war. This fear did exist after 1789 but there is no evidence that this fear had any bearing on the proceedings. As it happened, the records for coastal shipping tonnages handled by the port of Boston show a rise over the first period of conflict (1789-1803) and so, if there were any anxieties, they were to prove unfounded.

A second speculation which needs to be mentioned, although again it cannot be proven, concerns the indifferent state of the Witham Navigation at the time of the two Bills. How far the incomplete state of the Witham Navigation itself aided the failure of the 1784 Bill is nowhere mentioned (the works were completed to Lincoln in 1788) but, by the time of the 1792 application a complete water link with Lincoln had been established for 4 years.

PART FOUR

FINANCING AND BUILDING THE NAVIGATION

Raising the finance.

Before the Navigation could be constructed it was necessary to procure finance. With the Promotion Meeting being on October 11th.1791. and the Act passed on June 11th.1792., there was only a period of eight months in which this could be achieved. If the official date of the publication of the Jessop and Hudson estimate is taken as the time the subscription list was opened (November 25th.1791) this leaves approximately six and a half months. It is difficult to ascribe an exact date when the call for subscriptions was made as it does not seem to have been advertised in the newspapers. The earliest date it is possible to determine is December 26th.1791., when Boston Corporation decided to purchase five shares in the venture.¹ It is most likely, though, that subscriptions were opened at the Promotion Meeting and it may have been that as the majority of share purchasers were local people, most of whom had been aware of and in favour of the Navigation from its conception, sufficient promises of contributions had been received to make advertising unnecessary.

The Act allowed for an initial capital of £13,000 and, by the time of the Royal Assent, £12,300 had been contributed.² Of 41 subscribers then, 24 (holding 78 shares) lived within 10 miles of Sleaford and/or had been supporters since 1791. If a wider view is taken, only 2 subscribers (holding 7 shares) resided outside a 20-mile radius of

1 Boston Corporation Minutes, vol.7. December 26th.1791. Municipal Offices, Boston. The Corporation was willing to speculate on the success of the Navigation improving Boston's trade. A similar act of faith was not made by the City of Lincoln.

2 List of proprietors given in the Act c.f. the share purchasers as noted in the Sleaford Navigation Share Transfer Book, P.S.J. Collection, Lincoln Archives. This figure could alternatively be £12,200 or £12,500, depending upon whether "William Byre" as noted in the Act was the father, or the son or both combined for share purposes

Sleaford town centre by the time the share-issuing was completed on May 5th.1801. One of these included the famous Dr.Brasnus Darwin of Derby

Taken at its maximum, the total number of shares taken up as on June 11th.1792 was 125. On July 3rd.1792 three further subscribers were admitted, taking between them 5 shares. This produced the 130 shares authorised to be issued by Clause 44 of the Sleaford Act. The ownership of the shares was entered alphabetically¹ into the Share Transfer Book, made out under the date of July 5th.1794, two months after the Navigation began operating.

Following the last entry of this date are two further entries for shares, dated June 14th.1817. One of these is for land purchased from Carre Hospital² in Sleaford on which the Navigation intended to, and did, build a public wharf. The Company of Proprietors' Minutes for February 18th.1795 ordered that the Rev.Edward Waterson be contracted with for the purchase of part of the hospital yard for this purpose for £400. This money was, therefore, paid in the form of shares under a conveyance dated May 21st.1796.³ This took the number of shares issued past 130, but this was allowed for in Clause 46 of the Act. Benjamin Handley and Benjamin Cheales were to receive the profits from these four shares, to be held in trust for the hospital.

The second entry was for one additional share, taken up by William White of Timberland, north of Sleaford, on May 5th.1801.⁴ Why there

1 Although not strictly - see share list, p.103.

2 Entered in the Share Transfer Book as "Sleaford Hospital".

3 A typewritten copy held by W.Hosford, Esq of Sleaford.

4 Also noted as of "Aswarby", a village about 4 miles south of Sleaford and seat of Sir Thomas Whitechete.

PURCHASERS OF THE ORIGINAL SHARES IN THE SLEAFORD NAVIGATION COMPANY ISSUED UNDER THE SEAL OF THE COMPANY ON JULY 5th. 1794.

<u>NAME.</u>	<u>PLACE OF RESIDENCE.</u>	<u>OCCUPATION.</u>	<u>IS NAME IN SLEAFORD ACT?</u>	<u>SHARE VALUE BEFORE DECEMBER 28th.1793.</u>	<u>SHARE VALUE AFTER DECEMBER 28th.1793.</u>	<u>SHARE NUMBERS HELD</u>
ANDREWS. Rev. John. (1)	New Sleaford	Clerk	Yes	£600	£750	1 - 6 incl.
AINSWORTH. James.	New Sleaford	Mercer	Yes	£100	£125	7
ALMOND. William.	New Sleaford	Miller	Yes	£200	£250	8 & 9
ASHWORTH. Richard. (decd.)	New Sleaford	-	Yes	£1,000	£1,000	10 - 19 incl.
BOSTON CORPORATION.	-	-	Yes	£500	£500	20 - 24 incl.
BROCKE. Rev. John Moore.	Folkingham	Clerk	Yes	£100	£125	25
BLAND. Thomas.	Newark	Surgeon	Yes	£200	£250	26 & 27
BATES. Edward. (2)	New Sleaford	Innholder	Yes	£500	£625	28 - 32 incl.
BRITTAIN. John.	New Sleaford	Merchant	Yes	£100	£125	33
BULLAR. James.	New Sleaford	Hairdresser	Yes	£100	£125	34
CAPERN. Rev. John (3)	New Sleaford	Clerk	Yes	£500	£625	35 - 39 incl.
CLARKE. Rev. John.	New Sleaford	Clerk	Yes	£100	£125	40
COOPER. Benjamin.	New Sleaford	Gent.	Yes	£200	£200	41 & 42
CLARKE. Henry.	Boston	Merchant	Yes	£100	£125	43
COOPER. John Hutton.	New Sleaford	Surgeon	Yes	£500	£625	44 - 48 incl.
DARWIN. Robert Waring.	Elston, Notts.	Gent.	Yes	£400	£500	49 - 52 incl.
DARWIN. Erasmus.	Derby	M.D.	Yes	£500	£625	53 - 57 incl.
ELLISON. Richard.	Sudbrooke Holme	Esquire	Yes	£200	£250	58 & 59
EYRE. William, the older.	Newark	-	? (4)	£300	£300	60 - 62 incl.
EYRE. William, the younger.	Newark	-	? (5)	£200	£200	63 & 64
FYDELL. Thomas.	Boston	Esquire (6)	Yes	£200	£200	65 & 66
FELTINGHAM. William. (7)	Flaughborough (8)	-	Yes	£200	£250	67 & 68
FISHER. William.	Kirkby Lathorpe.	Gent.	Yes	£100	£125	69
GORDON. Sir Jonison William	Haverholme Priory	Baronet	Yes	£500	£625	70 - 74 incl.
GUTHRIE. James.	Newark	-	Yes	£500	£500	75 - 79 incl.
GEE. Henry. (9)	Boston	Merchant	Yes	£100	£125	80
HARE. John. (10)	The Hall, Lincoln.	Esquire	Yes	£300	£375	81 - 83 incl.
HARE. Ann.	New Sleaford	-	Yes	£500	£625	84 - 88 incl.
KIRTON. William. (11)	New Sleaford	Merchant	Yes	£500	£625	89 - 93 incl.
LAWRENCE. Joseph.	Grantham	Esquire	Yes	£400	£500	94 - 97 incl.
LOMAX. Elizabeth. (decd.)	Sleaford	-	Yes	£100	£125	98
MYREN. Rev. John.	Edenham	Clerk	Yes	£400	£500	99 - 102 incl.
MASSEY. John.	Brauncewell	Gent.	No (12)	£100	£125	103
OMMANNY. Edward.	London	Esquire	Yes	£200	£250	104 & 105
PEACOCK. Anthony.	South Kyme	Esquire (13)	Yes	£500	£625	106 - 110 incl.
PUGH. Rev. John.	North Raucoby	Clerk	Yes	£100	£125	111
FOLKINGTON. William. (14)	Shoxton (15)	Farmer	Yes	£100	£100	112
PARKER. Mary.	Edenham	-	No (12)	£200	£250	113 & 114
TINDALE. Thomas.	Ewerby Thorpe	Grazier	Yes	£300	£375	115 - 117 incl.
TURNEY. John.	Sedgbrook (16)	Grazier	No (12)	£200	£250	118 & 119
WHITCHOP. Sir Thomas.	Aswarby	Baronet	Yes	£500	£625	120 - 124 incl.
WATERSOP. Rev. Edward.	New Sleaford	Clerk	Yes	£200	£250	125 & 126
WOODFORD. John.	New Sleaford	Mercer	Yes	£300	£375	127 - 129 incl.
WOODFORD. William.	New Sleaford	Merchant	Yes	£100	£125	130
ADDITIONAL SHARES, ISSUED UNDER THE SEAL OF THE COMPANY,						
SLEAFORD HOSPITAL.	-	-	No	(17)	£400	131 - 134 incl.
WHITES. William.	Timberland	-	No (18)	-	£100	135

£13,000

£16,000 = TOTAL SHARE CAPITAL.

Source: Sleaford Navigation Share Transfer Book.
3 P.S.J. Lincoln Archives.

(For notes, see under.)

Fig.7

THE DISTRIBUTION OF SHAREHOLDERS AND SHARES IN THE SLEAFORD NAVIGATION ~ as on July 5th. 1801

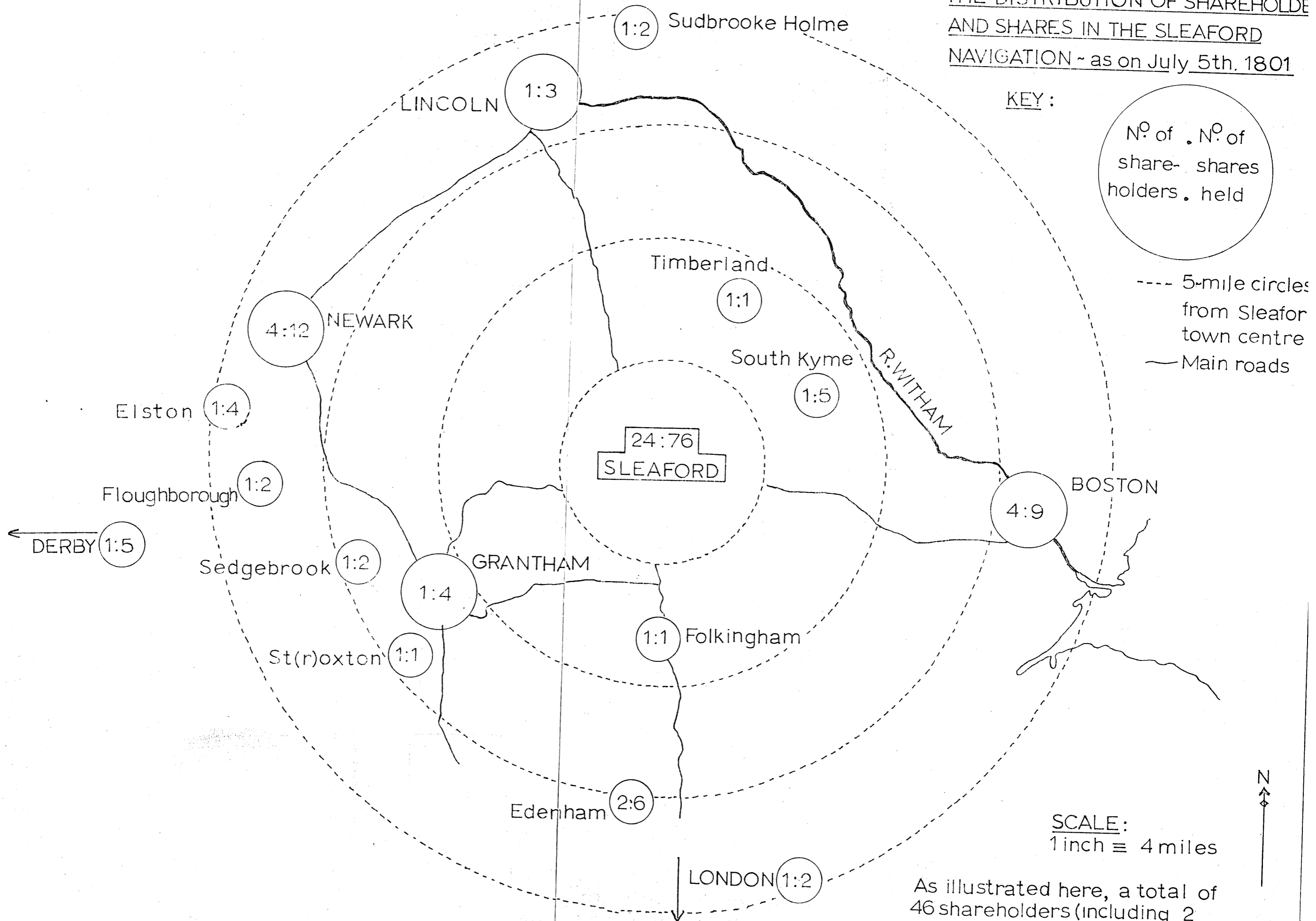


Fig. 8

should have been this long interval between the initial allocation and the entry into the Share Book is not indicated.

The first order of the first business meeting of the Committee of Proprietors, held on July 3rd.1792, was to make a "call" of 10% on the subscribers, Further "calls" on monies subscribed were made as follows:

<u>Call</u>	<u>Date</u>	<u>Amount</u>
1	3.7.1792	£10%
2	23.8.1792	£10%
3	19.10.1792	£10%
4	18.2.1793	£10%
5	18.3.1793	£10%
6	22.4.1793	£10%
7	7.5.1793	£10%
8	17.6.1793	£10%
9	8.7.1793	£10%
10	16.9.1793	£10%
	28.12.1793	£25%
11	? .2.1794	£10% ¹
12	17.3.1794	£10%

1 The "Lincoln, Rutland and Stamford Mercury" for February 7th. and 14th.1794 advertised a £10% call, dated February 4th. However, a Committee of Proprietors' meeting on February 3rd. made no mention of this although the meeting prior to that (on January 27th) did examine the state of the accounts and deferred any consideration until the next meeting. In the light of these accounts a further call was authorised which was not recorded in the minutes. This is verified by an examination of the private accounts of those shareholders who banked with, "Messrs. Peacock, Handley and Kirton and Co" of Sleaford, which show that this call was made and answered.

The company was trying to complete the works as quickly as possible, especially after the beginning of February, 1793 when the war with France began. The reasons for this were given by Sir Joseph Banks in two letters written regarding work on the Horneastle Navigation yet, nevertheless, still relevant to the Sleaford,

"My opinion is that we ought to agree with him¹ even if his price was dearer than I have mentioned², the scarcity of engineers is all but incredible ... but no one will doubt that during this canal madness the price of engineers will rise very rapidly."³

"I am aware of the necessity of hastening our works lest the continuence of war should enhance the value of money so much as to make it distressing to our subscribers to advance their subscriptions ... "⁴

Competition for workers⁵ and engineers, the threat of inflation and a general underestimation of the amount of capital required for building the navigation were some of the problems which had to be faced during this period.

1 Referring to William Cawley of Cheshire, the first engineer engaged on the construction of the Horncastle Navigation.

2 £250-£300 per annum.

3 Letter to Richard Clitherow, clerk of the Horncastle Navigation, dated, Soho Square, February 22nd.1793. SGS BS 18/9.

4 Letter probably also to Richard Clitherow, dated, Soho Square, March 5th.1793. SGS BS 18/9.

5 In the case of the Sleaford this competition would not have been as great as on many other waterways. As the work was basically the same as any drainage works in the Fens undertaken here as a regular part of rural life, the expertise and labour to alter a river to a navigation existed within the district.

After the 10th. call in September, 1793 there was a three-month gap until a 25% was asked for on December 23th. By December the works had been completed from the Witham into the Sleaford Mill Stream. By then 130 shares had been issued which, when the 10th. call had been answered, produced £13,000. It has been stated by one authority that expenditure up to that date was £13,000.¹ Things seemed to be getting serious for Sir Joseph wrote to Richard Clitherow,

"I observe at Sleaford that 10 subscribers² have called an Extraordinary General Meeting. Pray, what is the news from thence?"³

Clitherow replied,

"I understand the General Meeting called at Sleaford is.../called/ ... to raise £20 per cent more on their subscriptions to complete their works in sum of which I am sorry to hear that they have been as unfortunate as we.⁴ They have both a lock and a bridge to rebuild but I apprehend in their case the loss falls upon the undertaker and not the company, yet of this I am not certain."⁵

1 Not a reliable figure as it is mentioned without references in a "Case and Opinion" in connection with the case of "Sleaford Navigation vs. Thomas Bacon" P.R.O. KB1/59/X/K1411.

2 The 10 were, Benjamin Handley, William Kirton, Revs. John Andrews and Edward Waterson, William Almond, John Brittain, John Ainsworth, Edward Bates, John and William Woodford. see "Lincolnshire, Rutland and Stamford Mercury" for December 13th, 1793

3 Letter dated September 23rd, 1793. SGS B3 18/10.

4 William Hawley did not perform well on the Horncastle. William Jessop and John Rennie had to come to the rescue.

5 Letter dated December 26th, 1793. SGS B3 18/10. For details of the Sleaford problems see p. 123 ff.

The meeting to resolve this financial dilemma met on December 28th. The company minutes for that date record a call on the subscribers of £25% and this would seem to contradict the "£20 per cent" mentioned in Clitherow's letter quoted above. Indeed, even the "Case and Opinion" (see note 1, p.106) talks of a £25% call being made and this in a document written much nearer the actual happening than we. This seems to be a mistake, one possibly made due to the fact that no-one who took part in the financial dealings in 1793 was then still living and also ~~because~~ the company minutes do not appear to record the whole story.

At the emergency meeting of December 28th. an irregular procedure seems to have been adopted and, in order to see what happened, it is necessary to mention briefly the private accounts of the shareholders who banked with the firm of "Peacock, Handley and Kirton and Co." in Northgate, Sleaford. In an examination of these accounts¹ no shareholder made a payment equivalent to £25% on his shareholding during this period, even though his calls are individually listed and include the two calls made after December 28th. of £10% each.

The irregular practice of "watering the capital" seems to have been entered upon whereby in return for an additional subscription of £20 per share the company raised the individual share values by £25. This would, of course, lead to a lower dividend expectation for those shareholders who either did not want to, or could not afford to, raise this additional capital.²

1 Other accounts are dealt with in more detail in Appendix D

2 In effect this would be the equivalent of a Rights Issue today.

Of the 41 shareholders at that time (not counting the Carre Hospital), 35 paid the extra amount on each of their shares which, totalling 100 shares exactly, realised a further £2,000. This was sufficient to complete the works, at least to a state at which vessels could navigate the river, up to the wharf built on the Carre Hospital land lying on the eastern side of the town. This did not solve all the company's financial problems but it was the last time the shareholders were asked to contribute. With the Navigation in operation other solutions would be found.

The reaction of one shareholder to this rather inauspicious financial beginning is recorded. The Corporation of Boston became rather disenchanted with the prospects of the Navigation's viability and it was,

"Resolved that this Corporation do not think it expedient to advance any further sums of money on their subscription to the Sleaford Navigation and the Town Clerk is ordered to acquaint Mr. Cheales therewith."¹

June 10th to June 25rd.1792

The day before the Royal Assent was obtained for the Sleaford Bill Benjamin Handley wrote to Sir Joseph Banks² in reply to a communication received from him. Sir Joseph's letter has not survived but it was probably one of congratulation on the success achieved. Handley had been instructed by the shareholders to thank him for his letter and also to acknowledge the great support he had given the Bill, both in Lincolnshire and during its passage through Parliament. They had one further request to ask of him - that he would suggest a design for the seal of the new company which Handley could show to the first General

¹ Boston Corporation Minutes, vo.7, June 26th.1794. This would seem to be a very late reply to the loan request.

² Letter dated, June 10th.1792. SGS BS 14/1/5.

Meeting of subscribers to be held the following Friday. Sir Joseph obviously agreed to this and there exist two draft designs and a finished drawing.¹ Neither draft is the actual one which was accepted yet both contain features in common with the finished design. They both have a supporter on either side of the shield, a farmworker and a coalworker, symbolic of the main types of goods which the Navigation was intending to carry. In both a boat is shown in the upper one-third of the shield, with the remainder being occupied by various other devices. Possibilities as to additional symbols to include are mentioned below the design although these are difficult to decipher accurately due to Sir Joseph's poor handwriting. They probably read,

"a lock pit has a square top without walling", and

"a well = a round one with a wall."

There is also a suggestion as to a motto for the company,

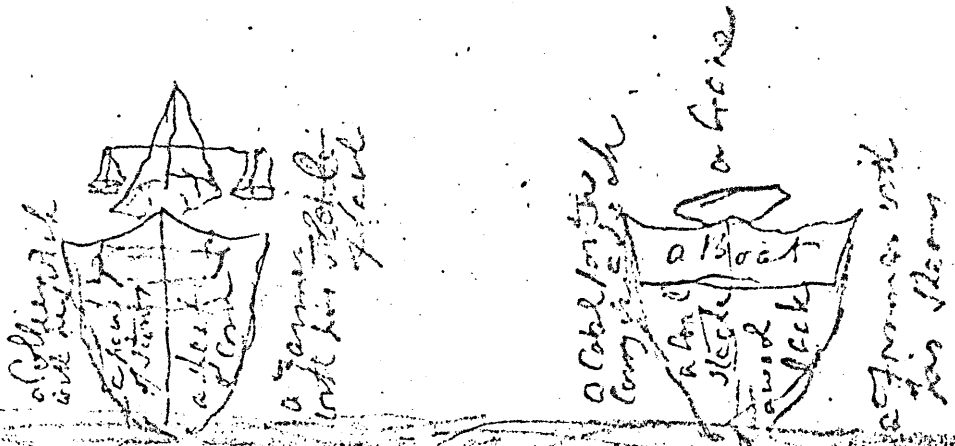
"Love quod bene fertur onus."

Sir Joseph's Latin was slightly incorrect and a corrected version was adopted.²

Some confusion as to dates arises at this point. Benjamin Handley had told Sir Joseph that the first General Meeting would be "holden on Friday next". As June 10th, the date of his letter, was a Sunday, this would mean that the meeting was set for the 15th. but it did not take place until the 22nd., some three weeks after the Act became operative. This meant that it took place on "Friday week", not "Friday next". This may have been due to a confusion in writing on Handley's part or the original date for the first meeting may have been put back by one week, a possible consequence if Sir Joseph had not completed the seal design by the 15th.

1 SGS BS 14

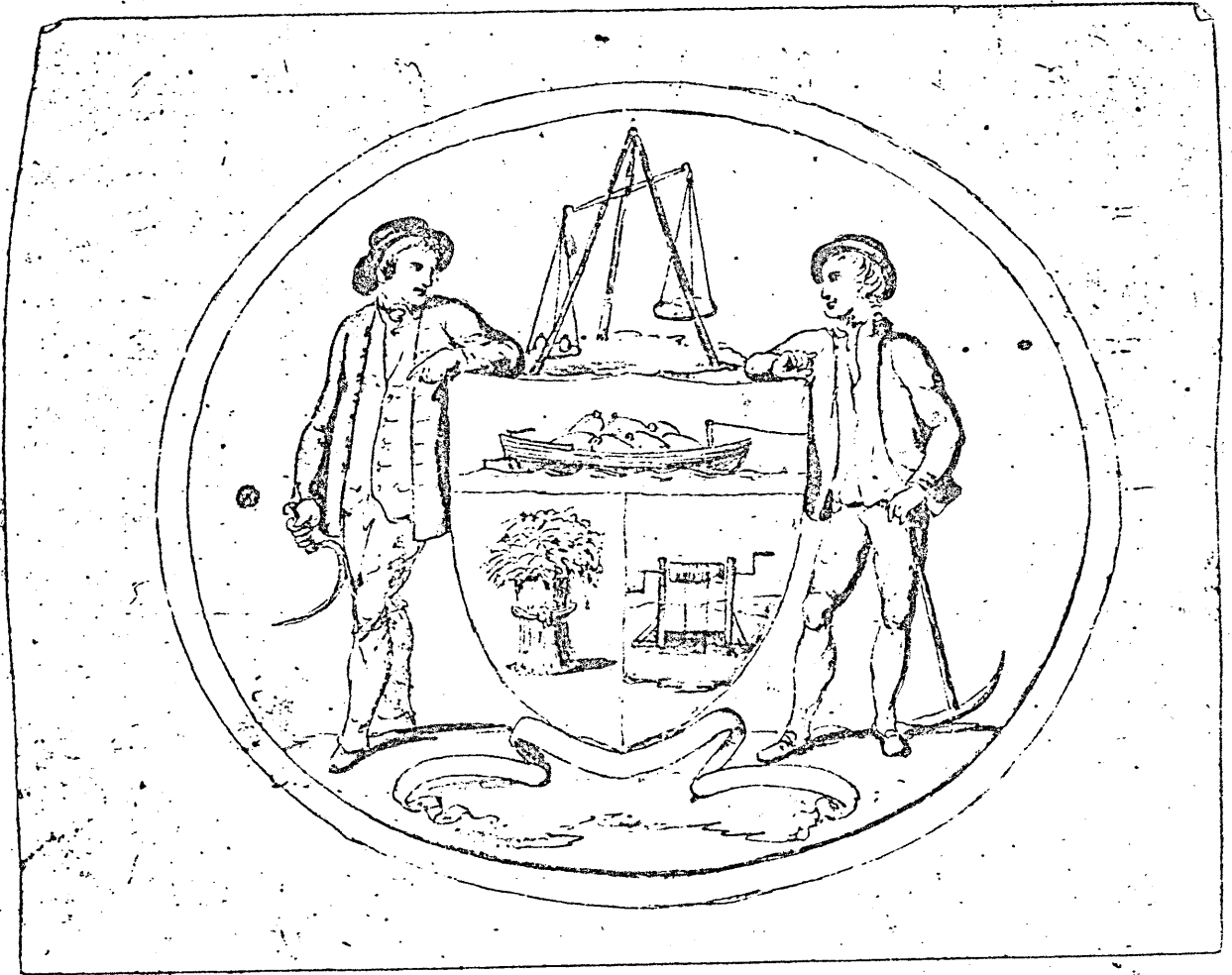
2 The adopted motto was, "Love fit quod bene fertur onus" = The burden which is rightly carried becomes light. Ovid, "Amorum", 1,2 and 10.



a lock pit has a square top with a balling
 a well a round one with a wall
 Levee quad has a pentagon one

Draft designs for a Common Seal.

Fig.10



The final, and accepted, design for a Common Seal.

Fig.11

The meeting held on June 22nd. is recorded in two sources; one is the Annual General Meeting minute book of the company¹ and the other is in a document sent to Sir Joseph.² To accord with the Act, the first meeting of the proprietors had to be held in the house of Edward Bates. As he was the innkeeper of the "George Inn", Sleaford, the meeting was held there. This is shown in the two sources noted above, for the minute book entry is headed, "The George Inn" while the letter to Sir Joseph reports the location as, "Edward Bates' house." Nineteen proprietors were present³. The official business was conducted first, with the appointment of the Committee of Proprietors, the group to organise the Navigation's construction and deal with day-to-day affairs. The shareholders elected were, Anthony Peacock, the banker, the Revs. John Andrews and Edward Waterson, William Kirton, the other banking partner, William Fisher, Thomas Tindale and John Woodford. The third banking partner, Benjamin Handley was elected treasurer and Benjamin Cheales, clerk, and who was allowed a salary of £20 a year. The choice of Handley as Treasurer was a wise one as he, together with Anthony Peacock and William Kirton had only two months before opened the "Peacock, Handley, and Kirton and Co." bank in Sleaford and so were "useful" people to have serving in the capacities they had just accepted.⁴

1 P.S.J. Collection, Lincoln Archives.

2 This is a copy of part of the minute. SGS BS 14/1/5.

3 They were, Sir Thomas Whichcote, Anthony Peacock, Revs. John Andrews John Caparn and Edward Waterson, and John Moore Brock, William Kirton, James Ainsworth, Benjamin Cooper, William Fisher, John Hutton Cooper, John Brittain, Edward Bates, William Almond, James Bullar, William Eyre, Thomas Tindale, William Pilkinton, John Woodford.

4 The election of a banker to the post of treasurer was becoming a common practice amongst navigation and canal companies at this time.

The second action of the meeting was to pass a vote of thanks in favour of Sir Joseph and this was ordered to be transmitted to him as their first act under the new seal, the final design of which was approved at this time. This vote of thanks read,

"Resolved unanimously that the thanks of the Company of Proprietors of the Sleaford Navigation be given to Sir Joseph Banks, Bart., for the essential services derived from his support of the scheme of Navigation and of the Bill through Parliament and also for the honour of the very suitable device which, at their request, he has formed for the common seal of the company and that this resolution be transmitted to Sir Joseph Banks as the first act of the company under their common seal."¹

This ended the proceedings of the first day but it was hardly likely that such an important occasion in the life of the town would have been allowed to go unnoticed. A private letter describes the celebrations,

"When it shall please God to permit us to see you at Sleaford, you will find great alterations for the better as by the joint interest of Mr. Handley and Mr. Cheales, a Bill has been passed in Parliament for making the river navigable to the Witham, which is hoped will prove a great advantage to trade. There was an illumination and great rejoicing on the occasion of Friday 22nd."²

A fuller report is obtained from the newspaper,

¹ Appears in the letter referred to in note 2, p.110.

² A letter to Thomas Fawcett from his sister, dated, "Sleaford, June 26th.1792", quoted in, "A History of the Free Churches of Sleaford", by T.Fawcett, 1902.

"On Friday, 22nd., at Sleaford ... The morning was ushered in with the ringing of bells, and the Proprietors met at 11 o'clock. When the business of the day was done, they adjourned to dinner at the George Inn, where they were met by a respectable number of gentlemen of the town and neighbourhood. Sir Thomas Whichcote was in the Chair, Many pleasant and constitutional toasts were given, and ten hogsheads of ale to the great multitude of people assembled in the Market Place. The whole concluded with an illumination, bonfires, fireworks, etc. The greatest conviviality reigned among all ranks of people and no accident happened to mar the general joy."

A second vote of thanks was sent to Sir Joseph by Benjamin Handley the following day - this time from a wider appreciative group,

"The inhabitants of the town and neighbourhood of Sleaford, highly sensible of the distinguished support afforded to the Sleaford Navigation by Sir Joseph Banks, Bart. and that his personal attendance and extensive information on the subject at the several meetings held in the country and during the progress of the Bill through Parliament very essentially promoted its success,

Resolved unanimously that their sincere thanks be given to Sir Joseph Banks for the honour of his services on that occasion and that their acknowledgements are also particularly due to him for the support which all measures that promise public utility in the county of Lincoln derive from his zeal and abilities."¹

Thus, it was with this very fulsome tribute from those whom he had helped over a period of about a decade that Sir Joseph Banks passed from the history of this enterprise.

¹ Letter dated, June 23rd. 1792. SGS BS 14/1/5.

Early construction decisions and the difficulty
in obtaining a surveyor.

The first business meetings were less than two weeks later, on July 3rd., and consisted of an adjourned General Meeting to agree to the admission of three new subscribers and a Committee of Proprietors' meeting, at which time the first call was made.

On the construction side, application had been made to the Witham Drainage Commissioners for permission to increase the lengths of the locks within their area of jurisdiction by 10 feet, to 70 feet, thereby reacting to the proposals to increase the size of the locks on the Trent Navigation and so be able to take the larger vessels which would be using that waterway.¹ This was granted at a meeting of that body held on the same day. William Jessop was to be contracted with for plans and sections for the larger locks and these used as a basis for advertising for tenders for their construction.

A further request was made, and granted, that the Drainage Commissioners would allow the water to be turned out of Kyme Eau by means of dams, adding that this should be done under the direction of the Commissioners' surveyor, William Bonner.

As work for the construction of the waterway had to begin from the Witham end the first contracts to be made were for the widening and deepening of the river from the Witham to the 1st. lock (the Bottom Lock). This contract went to William Bonner, which meant that he was to act in two capacities during the building period.²

¹ The locks on the Sleaford Mill Stream, outside the Witham Drainage jurisdiction, were similarly increased. It is strange but in all subsequent official references - Parliamentary reports, Lincolnshire directories, etc. they are still noted as being 60' in length.. The Horncastle's locks were also increased to 72' x 15'. "Report of the Horncastle Committee" July 7th.1795. SGS BS 18/9.

² For other contracts made, see Appendix F

The first signs of activity in actual construction occurred the following month. On August 1st. Samuel Tunnard, the clerk to the 2nd. District Drainage Commissioners wrote to his counterpart at Sleaford, Benjamin Cheales, requesting to be informed as to the date when and where work would begin in his District.¹ Only the previous day the Navigation Committee had decided that this should be on August 13th., at which time William Bonner would stake out the proposed works on Kyme Eau, beginning at Chapel Hill.² They anticipated that this would be completed by the 17th. and decided on that date to view the line taken, requesting the attendance on that occasion of both the Witham Drainage and 2nd. District Commissioners.

It was decided that a surveyor was needed to oversee the works on Kyme Eau contracted for by William Bonner and Edward Hare of Gosberton³ was appointed to this position at a wage of 3 guineas a week.⁴

At the same time as this appointment was made the first contracts for lock constructions were completed. These went to the partnership of John Dyson⁵, John Langwith, jnr. and Peter Tyler.

The building of the locks and bridges needed not only contractors but also a surveyor to oversee and direct the work. Edward Hare was not chosen for this task but, instead, Henry Eastburn was approached,⁶

1 Copy of the letter in BSIDB 2, Lincoln Archives.

2 Copy of the letter received, dated August 11th. 1792. BSIDB 2, p.213 and Sleaford Navigation Committee minutes, July 31st. 1792.

3 Sleaford Navigation Committee minutes, August 23rd. 1792.

4 Ibid. October 30th. 1792.

5 For details of John Dyson, see Appendix A

6 "Ordered that Mr. Eastburn be employed to overlook the locks and bridges ... [it is] the intention of the Committee to pay Mr. Eastburn in proportion to the estimate of such locks and bridges." Sleaford Navigation Committee minutes, October 3rd. 1792.

who at that time was working on the Basingstoke Canal. This decision to look outside the county was taken at the beginning of October, 1792 and the company minutes note that Richard Clitherow, the Horncastle clerk, was to be informed. The reason for this appears in a document relating to that Navigation,

"Resolved that the clerk do immediately write to Mr. Eastburn informing him that the Sleaford Committee have agreed to join with the Horncastle Committee in employing him to superintend both works if his engagements will permit him to enter on such employ in February or March next and request to know his terms which will be complied with if possible."¹

There is evidence that this communication was not the first and he may have previously indicated that he would not be available until the beginning of 1793.² The reply which he sent to this joint offer of employment was non-committal,

"To the Horncastle Committee,

Sirs, I received yours and think myself much honoured by the Committee's favourable opinion of me. It is impossible for me in my present position to say when I may be at liberty. If it should happen earlier than I can now see a probability [I] will take the liberty of informing you therewith. At the same time I wish

1 "Copy Resolutions of the Horncastle Committee." November 2nd. 1792
SGS BS 18/9.

2 "That a letter be immediately wrote by the clerk to the clerk of the Sleaford Navigation Co. informing them of the contents of Mr. Eastburn's last letter." (author's emphasis). Ibid.

the gentlemen by no means to put themselves under restraint if an opportunity of serving themselves offers - the chance of my being able to attend them being very uncertain.

I beg the favour of you to present my acknowledgement to the gentlemen of the Committee,

And I am, Sir,

Your obedient, humble Servant,

Henry Eastburn.

Odiham,

Nov. 11th. 1792.¹

Henry Eastburn was unable to take up the offered position and this led directly to a large financial loss by the Horncastle due to the employment of an alternative, incompetent engineer and the necessity of obtaining a second Act of Parliament to authorise the raising of additional capital.

Works and progress.

So, for a while, the Sleaford works were without a surveyor. This probably did not matter too greatly as work would normally have been slow during the winter and the February or March date mentioned in Richard Clitherow's letter would have been about the time when work would be expected to pick-up again.

The bridge and lock building would have to keep pace with the works being done by William Bonner and it was anticipated that these would be very limited during the first winter. He is reported as having told the 2nd. District that there was so much water in that district and the season so wet that work on Kyme Eau could not continue that season without the possibility of flooding occurring.²

¹ SGS BS 18/9. Any correspondence which Henry Eastburn had with the

Sleaford Navigation has not been preserved.

² BSIDE 2, p.221. October 17th. 1792.

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With the passing of the Sleaford Navigation Act the 2nd. District Commissioners appear to have ceased their opposition. They even recorded in their minutes that they,

"... wish to help in promoting the Navigation."¹

They accepted the fact of the Navigation and so seem to have resolved to make it prosper whilst still protecting their drainage interests as best they could. They showed their acceptance by cleaning out the "15 Foot" (i.e. Holland Dyke - the waterway leading into Holland Fen from Holland Tunnel) so that Holland Tunnel door could be opened and so run off water from Kyme Eau to enable the widening and deepening works below that tunnel to be carried on satisfactorily by William Bonner. This was in the September of 1792.

By the October this area was once again the scene of a dispute.

It seems to have been accepted by the House of Lords when the Sleaford Navigation Bill was before it earlier in 1792 that the authority of the 2nd. District did not extend over Holland Tunnel itself but was the responsibility of the 6th. District because it was not in South Kyme parish. Yet, in October, the 2nd. District said,

"Our surveyor reports that he ordered a lock to be put upon Holland Tunnel to prevent it being opened without his knowledge ... Mr. Richard York, assistant surveyor ... followed his father's instructions to put on a lock - but the lock was soon broken and the tunnel opened. He therefore shut the tunnel and put on a second lock ... [this was] also broken and the tunnel opened. On the 11th. (Thursday last) he was told by Stephen Bee of Maryland, publican,

¹ BIDD 2. p.216. September 19th. 1792.

that several workmen acting under Bonner had told him that if the 2nd. District Commissioners kept down the tunnel they had orders from Mr. Peacock to cut the bank."¹

The implication of this statement is that the 2nd. District still considered themselves to have an authority over the tunnel despite the arguments in the House of Lords. Why they should consider themselves the competent authority is difficult to see, unless sometime between June and October, 1792 the boundaries of the District had been altered. This would mean another alteration in the parish boundary between South Kyme and Swineshead but evidence for this is lacking.² The Commissioners reinforced their position by the assertion that no one had the authority to touch the tunnel but the surveyor, his deputy or anyone authorised by the Commissioners to do so.

The instructions by Anthony Peacock, the Sleaford Committee Chairman, if he did issue it, was ill-considered, as it had long been recognised and accepted by the Navigation that the banks on either side of the tunnel were vested in the Witham Drainage Commissioners and that to cut through them without permission was to lay themselves open to an action in the courts for trespass and damage.

Work on the banks continued into October. On the 3rd. the Committee instructed William Bonner to cut through into the Catchwater Drain in Anwick parish, obviously in order to allow for construction works to proceed below this point. This was followed on the 29th. by Edward Hare being given permission to begin removing the tunnels through

1 BSIDE 2, p.221. October 17th. 1792.

2 South Kyme parish records only date back to 1846 (Lincoln Archives). Although Swineshead Vestry Minutes date from 1771 (Swineshead Parish Church) there is no mention in them of any boundary changes after that date. From this time onwards the 2nd. District minutes (BSIDE 2) show that this authority was assumed by that body and recognised by the Navigation.

Kyne Eau bank and to replace them as directed by the Sleaford Act.¹

The removal and rebuilding of the tunnels could not be completed that year and continued into the latter part of 1793. Even in this there was not harmony with the 2nd. District.

By the July of 1793 the tunnels were ready to be laid between the 1st and 2nd. locks (Bottom Lock and Anwick Lock)² and the Witham Drainage Commissioners instructed William Bonner, now in his capacity as surveyor for that Commission, to attend at Sleaford whenever he was required.³ When Holland Tunnel had been finished the 2nd. District objected to the door which had been fixed. The Navigation had fitted a tankard lid⁴ and they told them to replace it with a clough door.⁵

The Navigation was not to be hurried and had not replied by September 18th. The Commissioners thereupon applied to the Witham Drainage Commissioners that they should direct their surveyor to do the work. On October 17th. the instruction from the Witham Commissioners was received for a clough door to be fitted.

When William Bonner had written to the 2nd. District Commissioners telling them that work could not continue during the winter of 1792 due to the possible danger of flooding, the lock pit for the 1st. lock

1 As to this work the 2nd. District noted, "No injury appears to have been done to the banks which is the boundary of this District, except by the removal of a tunnel which lay through the same between the lands of Messrs. Jackson and Copping!" BSIDB 2, p.230. Nov. 28th. 1792.

2 The 2nd. District's clerk was instructed to write to the Navigation's solicitors on July 10th. to enquire where Bonner intended to lay the tunnels. This laying was completed within the 2nd. District by July 31st. BSIDB 2, p.247 & 249.

3 IRA 1/52. July 2nd. 1793.

4 BSIDB 2. September 18th. 1793.

5 Ibid. August 23rd. 1793.

at Drury Dyke was probably finished, for, at the beginning of 1793 the Navigation Committee was telling the lock contractors, John Dyson and Co., to proceed without delay in the execution of their contract. It was possible to do this as the winter of 1792 was mild and so the fears expressed by Bonner were unfounded. The contractors had done little since being awarded the contract on August 24th. and the effects of not having a surveyor of locks were, perhaps, beginning to be felt.

There is a possible alternative explanation. The delay in the work on the locks may have been the result of difficulties with the plans and sections for them which were to have been prepared by William Jessop.¹ The Committee issued a rather strange order on January 21st. in connection with this matter. They instructed their clerk to send John Dyson a copy of the directions and instructions given by Jessop respecting the 1st. lock. Could the delay in beginning work have been due to these plans not having been received before then? If this was so it is hardly likely that contracts would have been signed by the contractors if they did not know what they were to build. Also, the Committee had noted previously that these plans were to form the basis on which the tenders for the contracts were to be advertised. One possible explanation might be that as Dyson and Jessop had worked together before, Dyson had been prepared to accept the contract based on his knowledge of Jessop's work.

With the building of the locks under way the construction of bridges could begin. The contract for four swivel bridges went to John Jagger of Gainsborough.² Once again, William Jessop had been employed to

1 See p.113 and Sleaford Committee minute for July 3rd. 1792.

2 In a unique document, the only written evidence of William Jessop making a decision as an arbitrator in a dispute between a Navigation Company (the Horncastle) and their contractors, John Jagger, one of the contractors, is described as a carpenter of Norton, near Gainsborough.

prepare these plans. Jagger's contract called for the first of these bridges, at Doughty's (Old) Hill to be finished by May 1st. and the others as and when the various locks were completed. This means that it was anticipated that the lock at Doughty's Hill would be ready by that date and instructions to begin turning the water out of the river here in order for construction to start were given to William Bonner by Edward Hare on February 22nd. This rate of progress is confirmed by the county newspaper which, on April 5th.1793. reported,

"The Navigation from Chapel Hill to Sleaford is already within a mile and a half of the latter place. There are near 400 hands employed about it ... "

This distance from Sleaford would bring the works up to Doughty's Hill. The report continued,

"When this is completed the Horncastle will begin immediately, if the harvest does not prevent it."

From this it would seem that the completion of the Sleaford works was expected by, approximately, the August of 1793. Also, the only way the harvest could prevent work starting on the Horncastle would be that the workmen were needed for this other task. So, this reference would indicate that the workmen labouring on the building were local and not composed of the travelling "navvy" gangs.¹

The position of surveyor of locks was also settled about this time. Only four days after being awarded the bridge contract, John Jagger was appointed surveyor to the works at the lower (1st.) lock at a wage of 5 guineas a week.

¹ It is possible that casual Irish workers were employed on the building as there is a tradition in this part of Lincolnshire for them to work on the harvest and this construction may have been viewed as an additional source of income.

Work on the Horncastle did begin in 1793 and before the Sleaford was finished.

The works reached the 2nd. lock, at Anwick, in April and so passed from Kyme Eau into the Sleaford Mill Stream. Edward Hare's contract as surveyor to the works being done by Bonner on Kyme Eau was, therefore, at an end. However, he was reappointed on April 3rd. as surveyor to the works in William Bonner's contract from the 2nd. lock to Sleaford Castle Causeway. Like Jagger he was to be paid 3 guineas a week.

The first year's Annual General Meeting occurred on May 7th. and was held to settle the accounts and elect a new Committee. The balance of the accounts showed a deficit of £945¹. The advantage of having a banker as treasurer now became apparent as this deficit was covered by Benjamin Handley himself. No alterations were made in the composition of the Committee.

The following day the Committee took a view of the works from the 2nd. lock to Haverholme Bridge, following which certain alterations to the Navigation were ordered including the deepening of the river to 6' below the crown of the arches of each of the bridges between those two places.

A further bridge alteration occurred a little later. On July 8th. John Jagger was instructed to raise the middle part of Chapel Hill Bridge, below the 1st. lock, by 3' so as to allow the vessels which were carrying materials up to the works being done on the river to pass under. This work was never carried out as Jagger suggested that a better scheme would be to make it into a balance bridge, being of greater advantage to the public and equally convenient for the purposes of the Navigation. This idea was accepted by the Committee.²

1 All monetary figures hereafter are given to the nearest £.

2 Sleaford Navigation Committee minutes, October 14th. 1793.

By this date the construction of the 1st. lock must have been completed for a keeper, Hugh Mountain Fox of Sleaford, was appointed on May 27th. This appointment, coming at a time when work was still progressing on the Mill Stream, would seem to indicate that Hyme Eau below the 2nd. lock was in use for traffic.

Problems with the contractors.

As harvest time approached it became obvious that the works would not be finished that autumn. Further alterations to existing structures were ordered and the approaches to the new bridges had still to be made.

As the contractors worked on the locks in the Mill Stream it became evident that they were not completing each one as they went along as their contracts stated but were putting in the foundations and building up to water level and then moving on. In April they had been working on Doughty's Mill lock - in September they had not finished it. They were told,

"... to immediately procede to erect the abutments at Doughty's Mill ..."¹

Their method of working was not to the liking of the Committee, which instructed,

"... that the contractors for the locks be directed, as soon as the lock at Mr. Almond's Mill² is got above water mark, to finish every lock and other work contained in their contract progressively and not to leave such work until the same is finished."³

This was the first indication of any disagreement between the company and their contractors and the general feeling seemed to be that

1 Sleaford Navigation Committee minutes, September 16th.1795.

2 That is, Coggesford Mill - the one nearest Sleaford.

3 Sleaford Navigation Committee minutes, October 14th.1795.

the contractors were not doing their work conscientiously. To obtain an accurate assessment of the state of the works both Edward Hare and John Jagger were asked to prepare statements as to the amount of work completed by the contractors under their direction. They were further requested to give their opinions as to the quality of such works.¹ This assessment was to include a report submitted by the contractors themselves but that of John Dyson and Co. was a long time coming. In the meantime, the bridge at South Kyne Ferry had to be rebuilt and, although details of this are lacking, it was probably necessitated by the inadequacy of the original construction by the contractors.² Reconstruction of this did not begin until the end of November.

There is then a gap in the official record with no mention being made of another construction failure. The letter from Richard Clitherow to Sir Joseph Banks of December 26th. 1793 previously referred to³ mentioned that a lock as well as a bridge needed to be reconstructed. There is no company minute to say which lock was involved but the trouble with it probably arose about the beginning of December. The additional expense which might be involved was causing great concern amongst certain of the shareholders who called an additional General Meeting for December 28th. to take the state of the finances into consideration.⁴ This resulted in the £20⁰ being requested from the subscribers and the raising of an additional £2,000.

1 Sleaford Navigation Committee minutes, October 28th. 1793.

2 See p.106

3 Ibid.

4 For an account of this meeting see p.107.

Even with these difficulties the works proceeded. With the bank, represented by the three partners, effectively financing the Navigation and covering its debts, the view was taken that as long as they were satisfied with the situation they would allow the construction work to continue. It will be remembered that at the May, 1793 Annual General Meeting, Benjamin Handley was owed over £900. This he financed from his personal current account and all contractors' bills were paid through his account and he was then repaid by the Navigation.

By the end of December the accounts of the works done by the contractors had not been received and the Committee took the step of instructing Handley not to pay over any more money to John Dyson and his associates until they were produced. This did not hasten the builders into action and their report was only received and considered by the Committee on January 27th, 1794, just three months from the time of first asking.

What this report contained is not now known but the reaction of the Committee to it could well have been one of disbelief. The adjournment of the meeting was called and the further consideration of the report deferred until February 3rd. A week's grace was possibly needed to digest fully the significance of the situation. When they met again the Committee simply recorded that,

"... it appears to the Committee that the contractors have received more money than such works, when completed to Bates' Bridge, will amount to."¹

¹ Sleaford Navigation Committee minutes, February 3rd, 1794. It is interesting that the Committee's statement says that the Navigation is to be completed to Bates' Bridge, not Sleaford Castle Causeway as specified in the Act. It was probably considered that the extra expense of taking the Navigation the additional few hundred yards through the centre of Sleaford to that location would not be justified by the extra cargoes which would come from there.

In short, the contractors had already spent more than the whole of their works should have cost and they had not reached the end of the Navigation. The order of the Committee, that no more money should be paid to the contractors was ratified and they were told to finish the works for which they had contracted at their own expense.

The feeling of the Committee towards the contractors can well be imagined but, equally, the contractors probably felt themselves wronged also. That they did was shown openly a few months later but a further incident occurred just a fortnight after this decision which would tend to substantiate the lack of faith of the Committee in them and their "couldn't-care-less" attitude. On February 17th. the

"... Committee ... received information that the lock at Haverholme Mill had given way."

The cause of this failure, according to the Committee,

"... arises from a defect in the mortar and other materials used therein and the workmanship thereof ..."¹

The Committee blamed the contractors and determined that it should be rebuilt correctly,

"It is therefore ordered that the contractors be required, at their own expense, to take down the north wall of the said lock and to rebuild it as under the direction of the Committee or their surveyor and are desired to pay

¹ This was the same cause for failure as happened at Tattershall Lower Lock on the Newcastle Navigation. This was the second time it had failed and one of the contractors for its building was John Jagger. See letter from Richard Clitheroe to Sir Joseph Banks, dated December 12th. 1793. SGS ES 18/9.

particular attention to the ties in such lock and the grouting and cement used in such joints and that Mr. Jagger, the surveyor, be directed to report to the Committee whatever improper steps he may think the contractors are taking in this rebuilding ..."¹

To facilitate the reconstruction the weir which had been erected at Haverholme Mill had to be removed and a temporary one inserted in order to keep the water level high enough to allow building materials to be brought up to the site.

By the end of March, 1794 the Navigation had reached a state of being ready for operation. This did not mean that all the works were completed but the essential structures and earthworks had been built and vessels could move up and down river in safety. This was the situation all along the river with the exception of Haverholme. The contractors work, or rather lack of it, did not please the Committee and they made their view known,

"The repairs at Haverholme lock not being proceeded in according to the order of the Committee ... it is ordered that the contractors be required to proceed in such repairs on or before Monday next, April 7th. or in default thereof the Committee will employ proper persons to do such repairs and charge the expenses to the contractors..."²

These repairs were carried out, and quickly, for one week after the deadline set by the Committee for this work to begin they were in the position of being able to announce that the Navigation would

¹ Call made on January 27th. 1794. Not recorded in company minutes but advertised in the "Lincolnshire, Rutland and Stamford Mercury" of February 7th. and 14th.

² Sleaford Navigation Committee minutes, March 31st. 1794.

be opened for vessels along its whole course, from the Witham to Sleaford, on Tuesday, May 6th.1794.¹

The feelings of the contractors now came into the open in the form of a threat to the company made through a newspaper advertisement,

"Whereas the Committee of the Company of Proprietors of the Sleaford Navigation caused an advertisement to be inserted in this paper last week, that the said Navigation will be open from the River Witham to Sleaford for the passage of boats, barges, etc. on May 6th. next, notice is hereby given that unless the said Committee do, before that time, satisfy the contractors for the work executed thereon, such Navigation will not then be opened.

John Dyson, for self and Co., contractors,
Sleaford, April 21st.1794."²

How the contractors intended to prevent the opening is not stated but they possibly had in mind a court action of some sort. The Navigation were quick to respond and used the same medium,

"April 28th.1794,

The Committee for conducting the works of the Sleaford Navigation do hereby give notice that the Navigation will be opened for the passage of vessels on the 6th. day of May next, notwithstanding an advertisement to the contrary inserted in last week's paper, signed, "John Dyson, for self and Co., contractors", whose conduct in the execution of the works for which they

1 The opening was to be advertised in local papers - Nottingham, Leeds and in the Hull packetboat. See "Lincolnshire, Rutland and Stamford Mercury" of April 18th. Notice dated April 15th.1794.

2 "Lincolnshire, Rutland and Stamford Mercury" of April 25th.1794.

contracted have become the subject of investigation in a court of law as the only proper place where differences between the parties (after such an advertisement) can be decided upon, - any further controversy on the part of the Committee in a public newspaper will be avoided.

By order of the Committee,

B.Cheales."¹

Eventually, William Jessop had to be called in to act as arbitrator, a contingency which had been allowed for in the original contract. Unfortunately, the outcome of this dispute is unknown. Benjamin Cheales wrote to Jessop in December, 1794 on the matter but no further mention appears in either the minutes or correspondence. However, all contact with John Dyson and his company after that was not lost as that firm did make a payment to the Navigation of about \$33 for an unspecified service, in February, 1797 - this may represent some form of damages.

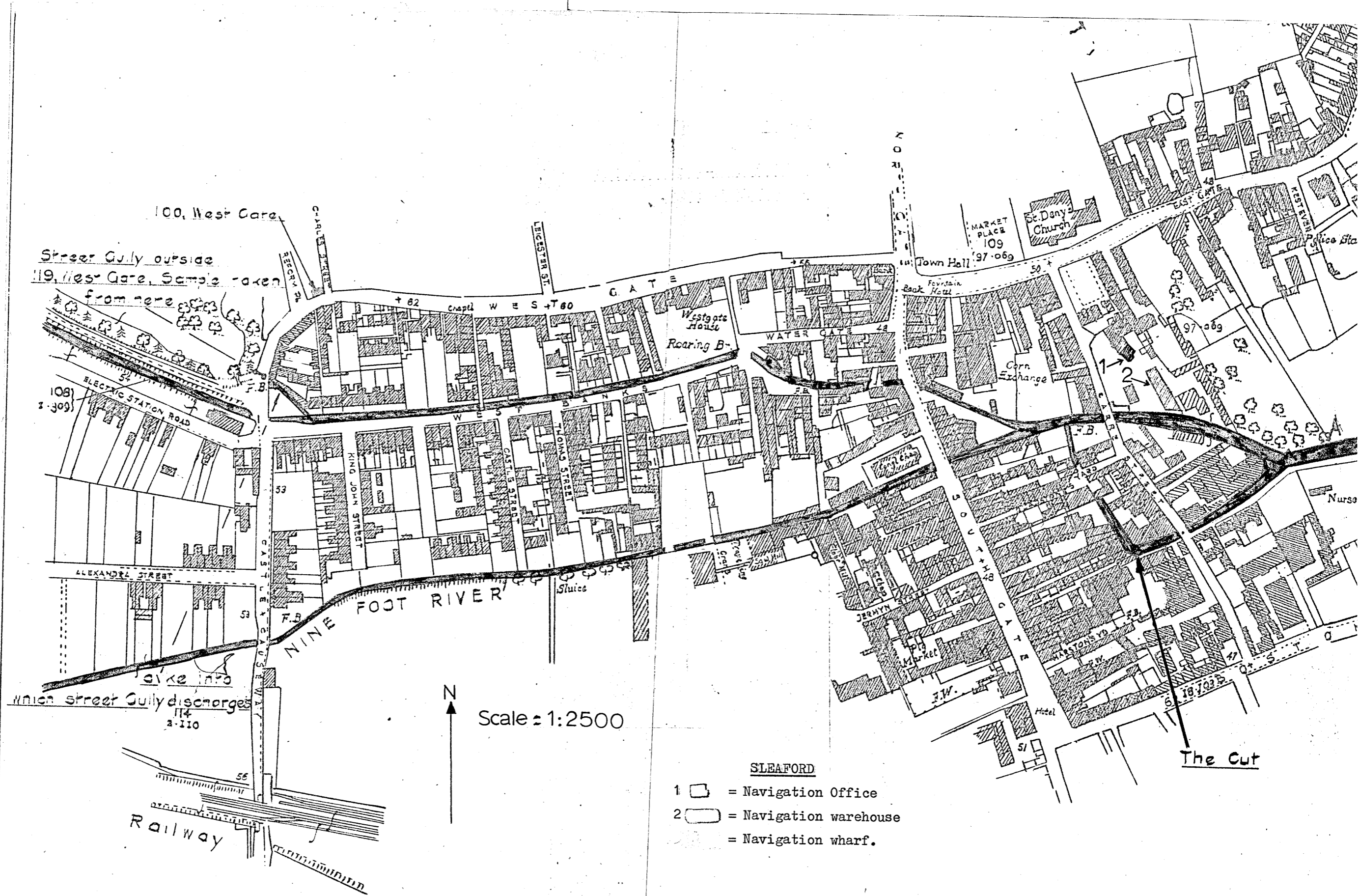
The opening of the Navigation.

In spite of the accusations and counter-accusations being made before the public, the Navigation did open for business on the date set, - which was also the day of the Annual General Meeting.

It would have been at this assembly that Benjamin Handley received tangible evidence of the debt felt towards him by the proprietors for he was probably given at that time a silver cup² inscribed on the base, "The Gift of the Proprietors of the Sleaford Navigation, 6 May 1794."²

1 "Lincolnshire, Rutland and Stamford Mercury" of April 28th. 1794.

2 Illustrated in "The Canals of East Anglia" by J. Boyes and R. Russell, David and Charles, 1977. The cup is now held by Mrs. E. V. Graham, "Redhouses", Plaston, East Transvaal, Republic of South Africa.



100, West Gate
 Street Gully outside
 119, West Gate, Sample taken
 from here

108
 2-309
 ELECTRIC STATION ROAD

ALEXANDRA STREET

Union street Gully discharges
 114
 2-110

Railway

NINE FOOT RIVER

Scale = 1:2500



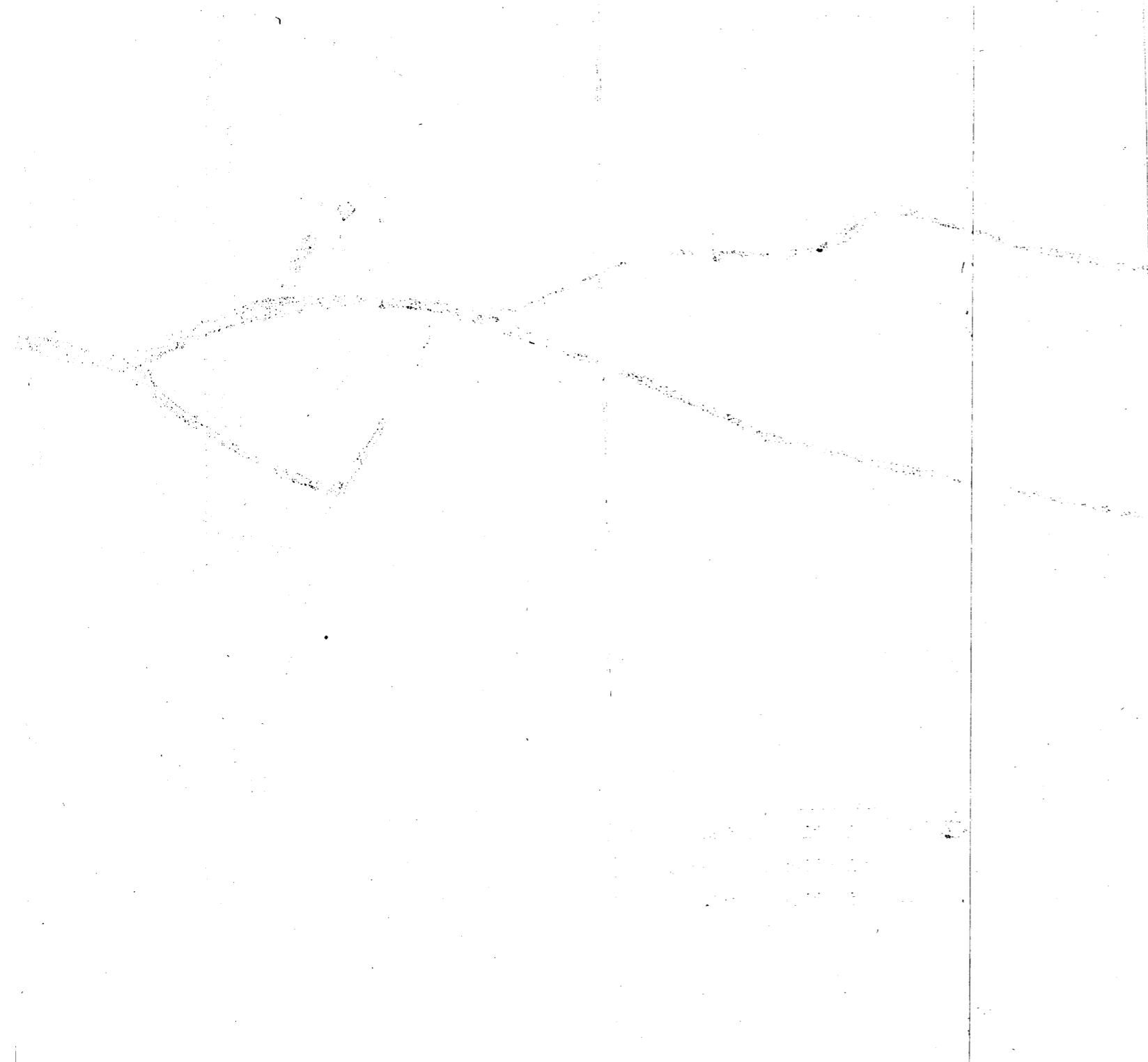
SLEAFORD

- 1 = Navigation Office
- 2 = Navigation warehouse
- 3 = Navigation wharf.

The Cut

Fig.12

SLEAFORD TOWN-CENTRE AND ITS
NAVIGATION FEATURES.



PART FIVE

THE EARLY OPERATING PERIOD, 1794-1803

The High Bridge Project.

Financial problems had to be faced during the very early period of operation and, while not as serious as those encountered during the construction which could have prevented the Navigation opening, they were still difficult enough to call for drastic action to be taken by the Committee.

Two debts faced the company on opening. The more immediate, in that it had not been anticipated, was the need to finish the works, while the second was the necessity to fulfil an obligation entered into, and sanctioned by the Horncastle Navigation Act, to cover part of the cost of completing a navigable link between the Witham and Poadike Navigations through the High Bridge at Lincoln. More of this later.

As far as the works were concerned on the day of opening the Annual General Meeting reported a balance-in-hand of £959. This was not thought to be sufficient but it must have been decided not to attempt to raise the additional capital needed by way of the shareholders as this would bring the total share capital of the company near to the limit of £19,500 imposed by the Act. While it might have been possible to obtain a second Act to allow for even more capital to be raised by means of a new share issue, as was done some years later on the Horncastle, there was no guarantee that there would be any takers. The decision instead was to obtain the sum needed by mortgaging the tolls and duties. Yet, so soon after the opening it is doubtful if anyone would be willing to speculate on the Navigation's viability so far as to bid for the tolls, etc. This was probably realised and the leasing did not take place.

The necessity for this cash was emphasised for, at this same time, the estimate for the High Bridge works was received.¹ These were the works which were briefly mentioned as being advantageous to any Sleaford Navigation, should it come into being, by Sir Joseph Banks in a letter to Benjamin Handley on December 6th.1791.²

The circumstances which led to the making of these works and the occurrence of the debt on the Sleaford Navigation in September,1794 were thus.

The 50% reduction of the toll on the Witham on goods passing to and from Sleaford to Boston and Lincoln may have been agreed to because the proprietors of the Sleaford Navigation had volunteered to contribute towards the costs of making the link between the Fossike and the Witham and thereby opening a route which would give access into the English Midlands and Yorkshire.³

For all the advantages which this link might present to Sleaford, the Sleaford supporters did not come to a quick decision. A reported Horncastle (intended) Navigation meeting proves this,

"The report of the Committee appointed to attend the Sleaford meeting⁴ (that no agreement was made with the Advocates for that Navigation respecting the intended navigable communication through Lincoln) was received ..."⁵

1 On September th.1794.

2 See p.57.

3 The advantages of this link appear in the "Lincoln, Rutland and Stamford Mercury" for November 11th and 18th.1791, being the report of a Horncastle (intended) Navigation meeting held at the Bull Inn, Horncastle on November 1st.

4 Probably that of December 29th.1791.

5 A meeting held on January 9th. and reported in the "Lincoln, Rutland and Stamford Mercury" of February 3rd.1792.

The area for which payments were finally decided to be made, by the Horncastle Navigation at least, was from the High Bridge in Lincoln to Stamp End lock.¹

A report on the works to be done was presented by John Hudson, William Bonner and William Jessop to the Witham Drainage Commissioners on March 20th.1792, when it was resolved to apply immediately to Parliament to complete this at the joint expense of the Witham Navigation Commissioners and the proprietors of the Sleaford and Horncastle Navigations,² thus showing that an agreement had finally been reached. The clerk of the intended Horncastle Navigation, Richard Clitherow, stated then that he had given notice to add this to his Bill. Benjamin Cheales, the Sleaford clerk, declared that the Sleaford proprietors had consented to take an equal share in the expenses but no suggestion was made that an additional clause concerning this should be inserted into the Sleaford Navigation Bill, which had been given permission to be presented to Parliament on March 1st. but which was not actually presented until May 9th.³

1 Specifically stated in a letter to the Witham Navigation Commissioners from Richard Clitherow, the Horncastle clerk. Witham Navigation minutes for May 15th.1792.

2 Who had received a similar toll reduction. The reduction was probably granted by the Witham Navigation in consideration of the advantages which a Horncastle Navigation would bring that Trust rather than as a "reward" for agreeing to finance this link. The toll reduction was granted on October 31st.1791, long before the Navigation had agreed to put the relevant clause into their Bill.

3 These details are dealt with in the Horncastle Navigation Act, pp.48-52. The Sleaford Navigation proprietors' liability to a proportion of the costs is mentioned on p.52 of the Act.

Whether the Navigations actually paid for the work done under this report is not clear. An earlier report¹ dealt with works by-passing the High Bridge and making use of the Sincil Dyke (as had been suggested by Handley to Banks in his letters of the previous December and January) together with a new cut of about 400 yards in length, while this second one involved the deepening of Brayford Pool between the High Bridge and the Fosdike and included, amongst other things, the raising of Stamp End weir. However, these works were, for the most part, outside the High Bridge to Stamp End lock section mentioned by Richard Clitherow.

Works dealing with this section were presented in a series of three reports and estimates between November, 1793 and September, 1794,² the first by Michael Pilley and the other two by him and John Tompson, engineer to the Don Navigation.³ Even these estimates included works on the Sincil Dyke and the erection of a lock outside the area, at Kirkstead.

The three estimates were officially presented to the Witham Drainage Commissioners on October 3rd, 1794 and were totalled at £3,497.

The clerk of the Drainage Commissioners was instructed to write to the clerks of the Horncastle and Sleaford Navigations, asking for their objections, if they had any. Each Navigation's contribution was to be one-third of this total (£1,165 each) of which 25% was requested to be paid by each Navigation to Bartholomew Claypon, the Drainage Commissioners'

1 By William Jessop, dated February 29th, 1792. Witham Navigation Reports No.1., Boston Reference Library.

2 The first was for Kirkstead lock, dated "November, 1793;" the second was concerned with works including that on the Sincil Dyke and dated, "Lincoln, June 26th, 1794" and the third, for works to be done from the High Bridge to Stamp End lock was dated, "Lincoln, September 6th, 1794" SGS BS 14.

3 Outside these records he is alternatively spelt, "Thompson".

treasurer, on or before November 30th.1794.

The Sleaford Committee did not have any objections to the scheme as such but stated that they would pay their share only when they had satisfactory assurances that proper works from and through the High Bridge into the Fosdike Canal would be done, in addition to those contained in the estimate, for ~~the~~ only took the works up to the High Bridge and no further.

The two Reverends, John Andrews and Edward Waterson, both Committee members, were sent to the General Commissioners for Navigation meeting on October 20th., where they talked with Michael Pilley. He was acting as agent for Richard Ellison who, as lessee of the Fosdike Canal, had a financial outlay to make on the works on his side of the High Bridge. These expenses were to be shared with the Corporation of Lincoln. Michael Pilley told them that Ellison was quite ready to perform his part of the works west of the High Bridge and meant to begin them as soon as possible in the Spring of 1795. While he, Ellison, understood that it was the intention of Lincoln Corporation to do their part, if there should be any delay in Lincoln beginning the works he would, at his own expense, make the whole works necessary for the completion of the link.

When this assurance had been transmitted to the Sleaford Committee they agreed the estimates and instructed the first percentage payment to be made. This decision was made only six days before the deadline of November 30th.¹

The payments for the works continued after that. A further 25% was asked for on August 20th.1795 and donations continued until April 6th. 1797. The only time the amounts do not seem to have been paid on time was in August, 1796. A 16% call had been made on July 5th., payable by August 25th. No Navigation had paid by then but they had all done so by September 27th.

¹ Sleaford Navigation Committee minutes, October 13th-November24th.1794.

At the "White Hart Hotel", Boston, on April 6th.1797, Michael Pilley's expenditures were examined. The works had been finished¹ and additional amounts from each contributor were required. Each had to pay an extra £388 which, along with the other debts which faced the Sleaford Navigation in 1797, brought the total amount of liability to non-banking institutions to £1,541.

Of all the debts the one due to the Witham Commissioners was the most pressing being backed, as it was, by the force of Parliament in the form of the Horncastle Navigation Act. The Sleaford company could not meet it, so it was,

"Ordered that such person or persons as may advance and pay the sum of £387.10.11d. due to the Witham Commissioners shall receive the same and interest from the tolls to be collected in preference to any other application of the money arising from such tolls."²

Benjamin Handley is the most likely person to have paid this.

Borrowing (to 1795)

Returning to the first year of operation once again, the new year of 1795 did not bring improved fortunes. By February the new warehouse on the wharf was ready for use³ but a new expense suddenly appeared.

1 The building of the locks had been undertaken by the firm of "Myers". This was probably Rowland Myers who had constructed the stonework on the Sleaford locks. Information contained in a letter from Richard Clitherow to Sir Joseph Banks, dated, "Horncastle, September 5th. 1801." Sutro Library, San Francisco, California, U.S.A.

2 Sleaford Navigation Annual General Meeting minutes, May 2nd.1797.

This is a mortgage under another name - a "prior charge".

3 Noted in Sleaford Navigation Committee minutes, February 16th.1795.

The "Derby Mercury" of February 26th.1795 carried the following information,

"Last Monday ... (9th.) the Bank of the Sleaford Canal gave way at Ewerby Fen, upwards of ten yards in length, which continued running with near 10 feet fall of water for a space of four days before the breach could be stopped."

This setback, with consequent loss of trade, meant more financial hardships. At a meeting on February 16th. a loan of £1,000 was obtained from Anthony Peacock and William Kirton personally (not from their bank)¹ and it was then estimated that another £1,000 would be needed to finish the works. The clerk was instructed to,

"... procure the same by the mortgage of the rates and duties accruing therefrom."

Not an easy task. In the event this sum was borrowed from Benjamin Handley.²

The Annual General Meeting of 1795 was held on May 5th. but an additional one occurred on June 9th., at which the bulk of the business was conducted. Of prime importance was the state of the accounts. As the company had retained control of the tolls during the first year money had been made from them. For the period from July 1st. 1794 until April 30th.1795 the balance of the receipts from tolls and wharfage and annual payments on account produced just over £320. This was sufficient for a £2.10.0d.½ dividend to be declared. This

1 Requested on February 16th. 1795 and the security for it dated August 10th.1795. Sleaford Navigation Committee minutes.

2 Requested on February 16th.1795 and the security for it dated October 5th.1795. Ibid.

dividend was obviously not justified by the state of the accounts and was probably made in order to bolster the confidence of the shareholders in the company. In addition, Benjamin Handley still retained over £120 on account of subscriptions to shares and money paid to him towards the erection of the works.

The navigation works were still not finished and this meeting estimated that instead of the £1,000 thought sufficient the previous February to complete the building, £2,000 more would see this done. This new figure probably included the £1,000 which was requested of Anthony Peacock and William Kirton, the security for which was not sealed until two months after this meeting.

When the meeting of February 16th. reported that it intended to raise the other £1,000 by mortgaging the tolls and duties it did not say that it had also asked Benjamin Handley for that sum, presumably to cover the company should the tolls be taken for less. At the 1795 Annual General Meeting an order was made for the tolls to be put out to tender and they went for £498.¹ This was not sufficient and Handley's loan was accepted and a security for it sealed on October 5th 1795. Thus, the total amount borrowed by the company in the form of loans from the time the navigation began operating until October, 1795, was £2,000.

The company began its working life under the Chairmanship of Anthony Peacock, who was also chairman of the Committee of Proprietors. This, together with the Treasurership being taken by Benjamin Handley, was probably the price paid by the company for their indebtedness to

¹ See the entry for "Sleaford" in, "White's Directory, Lincolnshire, 1856". Also, Creassy, "Sketches Illustrative of Old and New Sleaford." 1825. Sleaford Reference Library.

the Sleaford Bank partners. However, "Price" would be a poor description as these two, together with Benjamin Cheales, the Clerk to the company, were to serve the enterprise well and their participation was as much, and if not more, from a sense of civic pride as from thoughts of financial remuneration.¹

In their capacity as bankers, Anthony Peacock and Benjamin Handley (and obviously with the consent of William Kirton, the other partner) allowed the Navigation to amass debts on the bank amounting to about £1,200 during the first six years of operation and probably only when pressed by the Committee accepted a rate of interest on the money lent. Even then it was at $\frac{1}{2}\%$ less than normal for that time, i.e. $4\frac{1}{2}\%$ instead of 5% .²

¹ It can be said that the Navigation hastened the death of Anthony Peacock.

"He died in 1809, crippled with rheumatism brought on by remaining in wet clothes when superintending drainage works connected with some scheme of enabling barges to get up to Sleaford."

From a document issued to celebrate the centenary of the Sleaford Bank (otherwise known as the "Peacock, Handley and Kirton Bank"), published in 1895. In uncatalogued documents in Lloyds Bank, Northgate, Sleaford.

² There is a note in the Annual General Meeting minutes for May 3rd. 1796 that the Sleaford Bank was to be allowed 5% on all sums advanced but the bank does not seem to have availed itself of this order until 1799.

The largest sum ever owed to the bank by the Navigation was £1,193.17.8d. on February 22nd. 1797. To cover this amount Benjamin Cheales was instructed to prepare a security for £1,200. It was to be 14 years before the debt was fully paid off.

It has already been seen how much Benjamin Handley did for the Navigation, both in terms of time spent fighting for its establishment and then in supporting it financially from his personal account during its infancy. His commitment was recognised early on and he was allowed 5% interest on his loans to the company in 1796.

In his small way Benjamin Cheales, a solicitor by profession, was also helping financially. For example, he was owed about £170 from 1799 until it was repaid in 1808, a period of 9 years. This was, though, not exceptional. The state of the company finances was such that it seems some creditors were asked to wait. Even though interest was given on the sums due there must have been a desire amongst these people to see the Navigation a success - a desire to succeed which was greater than the financial considerations involved.¹ This does seem to have been civic pride in action - a wish for the area as a whole to prosper as well as the individuals immediately concerned. However, if the community prospered the individuals themselves would be likely to gain also.

The Sleaford to Tattershall Thorne Turnpike.

This altruism can be seen in a further instance. Not only were the 1790's a period of intense canal construction but it was also a time when road improvements were occurring in the form of Turnpike Acts. While these had been passed for other parts of Lincolnshire on earlier occasions, the building of the Sleaford Navigation coincided with the

¹ Other examples were: Thomas Tindale, £57, from 1797 to 1803 (6 years); Kirton, Woodford and Co., £169, from 1797 to 1806 (9 years); William Almond, £33, from 1797 to 1806 (9 years); Rev. Ed. Waterson, £15, from 1797 to 1806 (9 years); Samuel Cropper, £108, from 1797 to 1807 (10 years); Anthony Peacock, £25, from 1797 to 1807 (10 years); Edward Hare, £183, from 1797 to 1808 (11 years); Mr. Whitseal?, £8, from 1797 to 1810 (13 years).

promotion of what might, at first sight, appear as a competitor to that waterway - a road. When it is remembered that road and water were the only means of transportation then this competition aspect becomes even more pronounced.

On September 28th. 1792¹ there was a promotion meeting held at the "Angel Inn", Sleaford, for the construction of a turnpike road between Sleaford and Tattershall, some 13 miles to the east. The Navigation had only just obtained its Act and now an alternative means of communication was being planned which would rival it for, going to Tattershall which was on the eastern side of the Witham, the road would be running parallel with, and only a few hundred yards from, the Navigation, no matter which route it took.

Even more surprising was that Sir Joseph Banks was in the Chair and supporting the scheme. Also, Benjamin Handley was appointed clerk to the meeting and solicitor to the Bill. Were these people now trying to destroy the very Navigation for which they had been campaigning so long and which had only recently been brought into being?

The obvious answer is no. The turnpike was never intended to be a rival to the Navigation but rather to be complementary to it. The promotion meeting even considered a proposal that the line of the road should follow the haling path of the Navigation but this idea was not pursued as it was probably realised the interference with barge traffic which would be occasioned.

From the Bill which was presented to Parliament and other correspondence it is seen that the bulky goods, such as coal, iron and grain, were to be carried by the Navigation while the Turnpike was to be used

¹ SGS B3 16.

by coaches, waggons and for the movement of cattle.¹ While it would happen that merchandise would use the road, this was not to be its prime function. If this had been otherwise the support which the road proposal received would not have been forthcoming.

The survey for the road was carried out by John Dyson and John Langwith jnr.² while Dyson alone prepared an estimate of the costs of construction, which amounted to £3,551.

Much of the support which the road received was from the businessmen and merchants of Sleaford. If they had seen the Turnpike as a direct competitor with the Navigation they would have given their approval to one of the other, but certainly not both. A study of the Turnpike Act³ reveals this dual commitment as 24 of the Turnpike trustees were also Navigation shareholders - a figure of well over 50%.⁴ With these names are those of the landowners who had supported the Navigation; Sir Joseph Banks, Sir William Jenison Gordon and a member of the Whitchcote family, Thomas.⁵

1 There is no mention of charges for carrying cattle in the Sleaford Navigation Act. Could it be that this road was being contemplated and support for it assured even while the Navigation scheme was being formulated?

2 Map dated, "November 5th. 1792". SSS BS 16.

3 33 Geo. III cap. 150.

4 These trustees were: Sir William Jenison Gordon, Rev. J. Andrews, Wm. Almond, J. Ainsworth, J. Moore Brooke, Ed. Bates, J. Brittain, Rev. J. Caparn, Rev. J. Clarke, Benj. Cooper, Benj. Cheales, J. Hutton Cooper, R. W. Darwin, Eras. Darwin, Wm. Fisher, Benj. Handley, Anth. Peacock, Thos. Tindale, Thos. Whitchcote, Rev. Ed. Waterson, Wm. Woodford, J. Woodford.

5 This is probably Sir Thomas. It is of interest to note that one landowner through whose property the road was to run was Edward Ware, most likely the same person as the Navigation surveyor. His land would have been in the neighbourhood of Anwick.

From this information, and more,¹ can be drawn the conclusion that this period saw in Sleaford and the surrounding neighbourhood people who were willing and able to afford to speculate in enterprises of a public utility nature. Being mainly businessmen they expected a return on their invested capital but they were also demonstrating a belief in the future - that these works would encourage and assist the development of their whole region.

Company employees.

The number of men kept permanently on the company payroll during this early period was very small. It does not seem that craftsmen were employed full-time to attend to the necessary repairs and new constructions which would be required from time to time. These were hired as needed from those skilled in the various trades and residing in the town or immediate neighbourhood.

The most important of the employees was the resident surveyor and this post was first filled by John Jagger. There are very few direct references to Jagger in company documents or to works specifically entrusted to him although many repairs pending or completed are noted. He is mentioned in the minutes of the Annual General Meeting of May 2nd.1797 as being owed £79. for an unspecified reason. He was allowed a 3% rate of interest on this and was finally paid by an order of May 6th.1800.

1 The same people appear in, for example, the Sleaford Enclosure Award of 1794. It was supported in Parliament by Handley, Waterson, Kirton*, James Lomax*, Saml.Cropper, Andrews and Wm.Woodford. "Report of the Committee of the House of Lords", May 16th.1794.HLR0. (*=churchwardens.)

It can be suggested that enclosure was a consequence of the promotion of both the Navigation and the road to carry away the increased agricultural output which could be expected.

John Jagger appears to have left the employment of the company in 1804 - whether through the offer of another position or death is not mentioned. The vacancy was not advertised in the local paper, a fact most likely due to there being an acceptable replacement known to the Committee and immediately available. The new appointee was Thomas Rylatt of Heckington.¹ He had previously been employed by the Navigation in September, 1802 to repair the haling path, and a possible relative, George Rylatt, was engaged for a similar function in 1795-6.

Rylatt's appointment dated from May 14th, 1804 and for his work of viewing the Navigation once a month and reporting to the Clerk any repairs which were required he was allowed 4 guineas a year. An additional attendance allowance of 5/- a day was to be given whenever he superintended workmen making these repairs.

The Navigation received income from two major sources during the early period, from the collection of tolls and from the wharfage at the basin in Sleaford. At first the wharf and the warehouse were under the management of the company which appointed its own wharfinger and received to itself the wharfage dues. Thomas Rodgers² was employed in this capacity from September 6th, 1794 until May 9th, 1803, at an undisclosed salary. He was, however, allowed to keep 2/- in the £ on everything he collected after May 2nd, 1797. From May 9th, 1803 the wharf and warehouse, together with the dues of wharfage which went with them, were leased for an annual amount determined by auction. It is not known whether Thomas Rodgers was dismissed or remained in the company's employment in an alternative capacity.

1 He may have been related to George and William Rylett of Bardney, boat owners - see the entry for the keel, "Industry" on p.174.

2 Strangely noted as an "organist", "Universal British Directory", 1792, p.425. A large number of the surviving banknotes of the "Peacock, Handley and Kirton Bank" of the 1790's are payable to him - see p.143a.

A SLEAFORD BANK NOTE, issued in the name of Thomas Rodgers, the Navigation wharfinger.

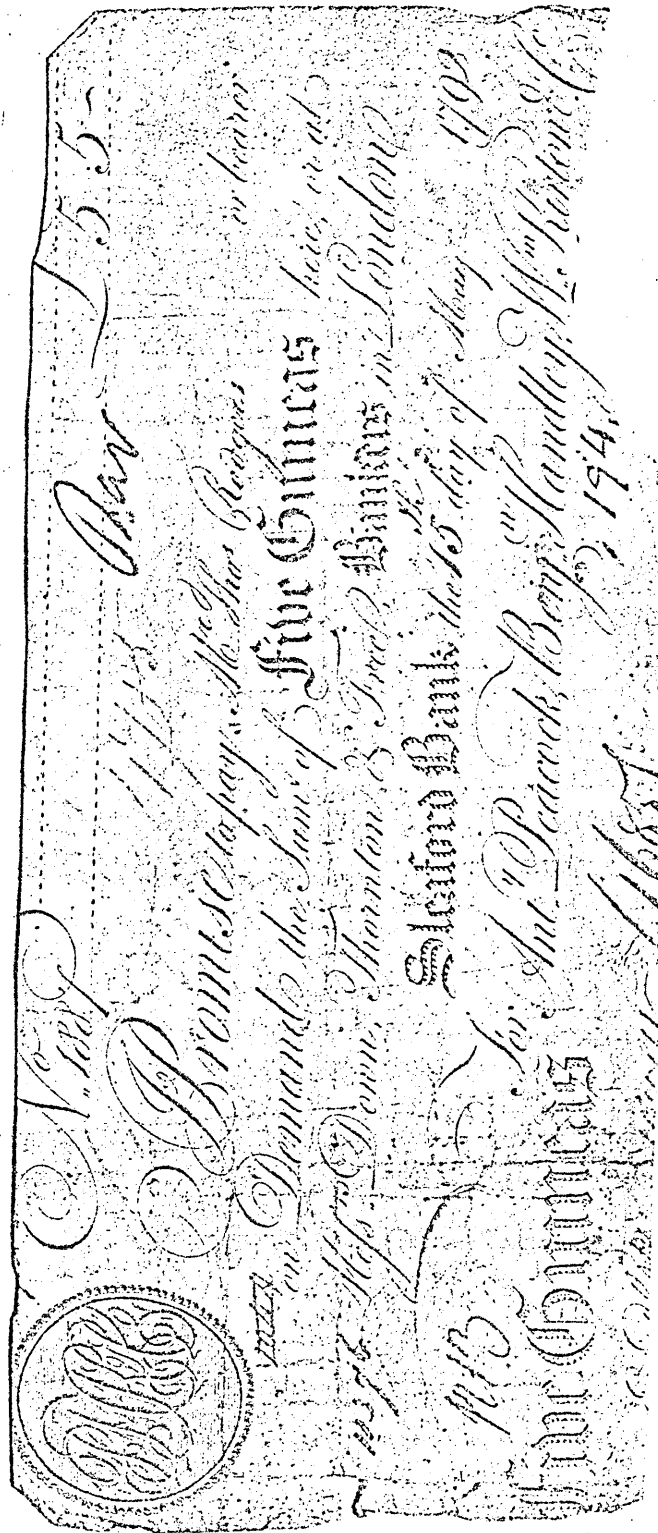


Fig.13

Company-appointed lock keepers were only found at the two locks in Kyme Eau, the 1st. and 2nd. locks, as they had been previously known.¹ After 1794 the 1st. lock was usually referred to as the "Bottom Lock" while the 2nd. was officially titled, "Anwick Lock".

The first lock keeper at Anwick was Anthony Thacker, employed for a sum of 4 guineas a year which was increased to 7 guineas in 1806. During the remainder of the life of this Navigation this lock was also known by this man's name - "Thacker's Lock". Although Thacker's appointment dated from June, 1794, it was not he but one, George Winter, who was in charge there when the Navigation opened for trade. Thacker did not take up his post until September of that year. This is nowhere directly stated but the company minutes record Winter being allowed 2 guineas for looking after the lock for 20 weeks. This George Winter, or possibly his son, reappears some years later when he took over as resident surveyor.²

The collection of the tolls on goods which were carried solely on the Navigation and not passing onto the Witham was made the responsibility of Anthony Thacker in 1803 (May 9th.) and he was allowed the rate of 2d. in the £ on everything collected.

The Bottom Lock was the place where the tolls were taken on goods in vessels passing onto the Witham and Hugh Mountain Fox was appointed lock keeper and collector here in July, 1793, before the Navigation opened. As with Thacker's Lock, for some time the Bottom Lock is mentioned in company records as "Fox's Lock". Fox remained there until 1806 when he had to relinquish the post due to ill-health.

It was decided that a Francis Chamberlain of Beckington should be

¹ A Mr. Pattinson was awarded £2.12.6d. for "attending Haverholme

Lock" for the year ending August 1st. 1795. He is not mentioned again.

² Appointed on June 11th. 1829.

asked by the surveyor to take up the management of the lock and the collection of the tolls. What this man's qualifications were are not recorded but as the surveyor, Thomas Rylatt, was from Heckington also, it can reasonably be postulated that the suggestion of this person came from him and was personally known to him. In the event, Chamberlain declined the offer and an alternative candidate applied. This was James Beeden of New Sleaford, a haymaker. He was accepted by the Committee but had to supply a security of £30. The money he collected in tolls was to be paid over weekly and it is interesting that it was not to be paid to the Treasurer but to John Peacock, the Chairman's second son. Really, there is little wonder in this for the Peacocks lived at South Kyme and it would be more convenient to pay the weekly takings to them than to bring the money into the bank or to Benjamin Handley personally at Sleaford.

Shortly after his appointment Beeden applied to the Committee for a salary increase to 10/6d. a week. This was granted. Anthony Thacker did not ask for a similar increase as the salary plus commission basis upon which he was operating was probably producing a greater weekly income than 10/6d.

Workmen employed occasionally by the Navigation fell into a number of groups. First there would be the casual workers who were hired to perform a specific task. Into these ranks would come the labourers, used when the manual work of, say, earth-moving needed to be done. These men were probably drawn from the agricultural labouring class of the immediate area, as they had been when the Navigation was under construction. When dams needed to be built to turn the water for repairs to be made they would probably be employed and they would certainly have been there when a large labour force was required quickly as when the banks gave way at Ewerby in 1795 or, on a smaller scale, between the Paper Mill and Evedon Bridge in December, 1797, or near Anwick Lock in March, 1804.

There are no records as to how many general labourers worked on these and similar repairs and only one reference appears in the early minutes to their existence at all, and then an oblique one, when a small shed, termed a "warehouse", was ordered to be built on the wharf in which to keep the workmen's tools.¹ These tools belonged to the company² but it is not clear whether they were to be issued to casual labourers or for use by workmen who were employed full-time. Considering the financial position of the company, the conclusion which would seem most logical would be for a permanent group not to be employed and a minute reference may help to confirm this. In 1807 the staunch at the Bottom Lock was being undermined by the river and Thomas Rylatt was instructed to,

" ... procure necessary workmen and labourers."

Regular maintenance of the waterway was needed and this tended to consist mainly of weeding the channel and making repairs to the haling path. The path repairs, known as "readings" were performed frequently and during the period 1794-1808 a different group of persons was contracted with on most occasions when reading was required, indicating that the work had been put out to tender.

Two independent workmen are mentioned quite often at this time. One was William Wright, a Sleaford carpenter. He was called upon to make repairs to the woodwork at various locks on a number of occasions. He first appeared in August, 1796 when the Committee asked him to assess the work needed to be done on the various lock doors and slackers and to carry it out. The next reference to him³ is in association with the second workman, a Mr. Wilson, who was a bricklayer. The work that they performed shows that a division of the Navigation for repair purposes

1 Sleaford Navigation Committee minutes, September 7th. 1807.

2 Ibid.

3 Sleaford Navigation Committee minutes, May 31st. 1802.

was in operation, the dividing point being at Anwick Lock. Wright and Wilson were responsible for the masonry and woodwork from the wharf and basin upto, and including, Haverholme Lock while a John Hall of South Kyme was instructed to assess and perform the repairs necessary at Anwick and the Bottom Lock. Wilson was engaged by himself to complete the repairs which were found wanting after a view in May, 1804, when it was the brickwork which was reported to be in a bad state, not the woodwork. When work was required on the warehouse in 1807 this was entrusted to Wright. This building had been in use for about 13 years and it does not seem to have worn well. -

"The Committee having viewed the floor of the wharf warehouse ... it appears on such a view to be in a very decayed state, it is ordered that Mr. Wright, carpenter, be directed to lay a new floor upon the old one."¹

He was also to paint the doors and some of the windows in the warehouse and was probably given the task of erecting supporting props for the roof beams at the same time. For this work he charged a total of less than £6.

Apart from carpentry work he is also mentioned as being employed to cut some of Sir Jenison Gordon's land which was required in order to repair a breach in the bank near Anwick Lock in March, 1804.

Leasing.

One group of people connected with the Navigation but not yet mentioned were the lessees of the tolls and of the wharf and warehouse.

Very little is known of the toll lessees during the early period. The tolls were only taken in 1795 and 1806 but who took them is not known.

¹ Sleaford Navigation Committee minutes, May 20th. 1807.

The leasing of the wharf and warehouse is much more fully documented, and the leasing of these and the yard was conducted differently at two different periods. To begin with, from 1794 the wharf yard was on a separate lease from the warehouse and wharf and they were in the hands of different individuals.

Dealing with the wharf yard first, the earliest occupant seems to have been the partnership of "Harrison and Squire"¹ as they are mentioned as having "lately occupied" the yard in a Committee minute entry for September 11th.1797. John Blundell, a Lincoln merchant, then took over at an annual rent of 5 guineas. With the yard went a house which he was obliged to keep in good repair.

Blundell remained in occupation for two years, at which time his place was taken by another partnership, that of John Teesdale and Samuel Darwin, two Boston merchants. Their rent was 2 guineas a year. They were probably engaged in the cereals trade and, because of this, they were given additional premises to those mentioned for former occupants. In return for having the use of four extra rooms, two most likely located over Carre's Free Schoolhouse and the other two adjoining the school, they would pay £10 a year. This money would come from wharfage dues on their cereals, at the then standard rate of 2d. per quarter for wheat, 1½d. per quarter for barley and 1d. per quarter for oats. If during the course of a year the dues did not amount to £10 they had to make up the deficiency. These two men agreed to these conditions on November 18th.1799.

1 According to the "Universal British Directory".1792 (the nearest Directory to 1797 - the next did not appear until 1826) there were two Harrisons and two Squires with businesses in Sleaford then, namely, William Harrison (draper and grocer) and John Harrison (fellmonger) and John Squire (victualler at the Mitre Inn) and Thomas Squire (farmer). See p.175 for the reasons why this partnership was most likely Harrison the draper and Thomas Squire.

They entered their occupancy while the company was still collecting the wharfage dues for itself in the person of Thomas Rodgers. This duality ended on May 9th.1803 when wharf, yard and warehouse, together with the wharfage dues were bought by John Preston of New Sleaford and Samuel Barnsdale of Newark for £50 a year, to run from the following Lady Day. The financial difficulties of the company were the probable reason for this change but it was still willing to give the new lessees a "fair deal",

"... if a fair and just account of wharfage shall be produced by the said Messrs.Preston and Barnsdale at the end of the said year and the same shall fall short of the proportion of wharfage as this day estimated, that then the rate of wharfage be decreased according to the sum actually received by the said Messrs.Preston and Barnsdale."¹

The rent was not paid at the time of the signing of the contract but at the end of the second year of occupation. The Navigation company considered² that for the first year up to Lady Day,1804. they would only charge £42. The clause in the agreement quoted above was obviously coming into effect and, although the details of trade on the Navigation for this time are lacking, the lessees could not have realised the £50 which had been the basis of the contract. For the second year the full £50 was to be paid, so indicating an increase of trade, which would have been the reason for the tolls being taken at auction in 1806. This arrangement suited the partners as they agreed to take the lease for an additional year, again at £50 a year.

1 Sleaford Navigation Committee minutes, May 9th.1803.

2 On May 6th.1806.

Their contract stated that they needed to make their intentions known to the Navigation not less than 3 months before the date of expiration of the lease whether they wished to renew it for a further year. As nothing had been heard from the lessees by the fourth week in February, 1807, the lease was transferred to William Cragg of Wyberton Roads, again at £50 a year. An additional duty was given to the lessee in Cragg's contract. It is possible that the falsification of tonnages being taken down the Navigation may have been being made for,

" ... the said William Cragg shall and do give tickets to all conductors of boats or vessels taking cargoes from his wharf for the quantities contained in the boats or vessels, the better to enable the lock-keeper to make proper charges for the tonnage."¹

Shortly after William Cragg took up the lease on April 6th. he took a partner, a Mr. Sneath of Normanton who is variously referred to as both Thomas and William. The joint-tenancy contract summary² does not mention any concessions given for grain carried on the Navigation as was found in the agreement with Preston and Barnsdale, indicating that these new tenants were not connected with that trade.

One year was enough for these tenants. They may have considered that a Bill then before Parliament for improving the Witham, but which contained a clause raising the amount taken in tolls on that river on goods going to and from Sleaford,³ would result in a loss of revenue to them, even though the Sleaford Navigation was then making a small overall profit.

Despite this, a new lessee was found from the next April 6th. In an effort to obtain a more reliable and constant flow of funds the company

¹ Sleaford Navigation Committee minutes, March 9th. 1807.

² Ibid.

³ See p. 161

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now made the lease triennial rather than annual. Again, the lessee was a partnership - that of William Harrison of New Sleaford¹ and Thomas Hall of Lincoln. The designation "merchant" is the only clue to their actual business interests. The £66 per annum rent had been determined by auction.

With Messrs. Harrison and Hall the detailed information concerning these lettings for the early period of operation comes to an end. The so-far undiscovered Company of 'Proprietors' Minute Book for the period April, 1808 until 1825 would contain this and although the Annual General Meeting minutes exist no further tenants for this time period are named.

Developments on the River Witham up to 1808.

On February 9th, 1808 the following entry was inserted into the Sleaford Committee minute book,

"The Commissioners for Navigation and Drainage by the River Witham, having given notice of their intention to apply to Parliament to deepen, alter and otherwise improve the Navigation of the said River, and Mr. Chapman of Newcastle-upon-Tyne, an engineer, having been employed on the part of several of the Proprietors of lands affected by the Witham Drainage, to view the lands and report how far the scheme proposed by the Witham Commissioners would affect or be detrimental to their several interests ..."

This reference relates to a series of events which had taken place over the previous 6 years and which were soon to reach fruition. Its significance lies in that the situation to which it is referring was the cause of the difficulties which the Sleaford Navigation found itself in after 1797.

It has already been seen how financial difficulties were faced

¹ See footnote 1, p.148.

between 1794 and 1797 and how they seemed to be the result of additional constructional costs and the burden on the collected tolls of paying for the navigable link between the Witham and Fosdike Navigations. But, even after the company's full share of these costs had been expended the economic fortunes did not improve.

For the period between 1794 and 1803 the only direct documentary evidence relating to the economic condition of the Navigation are the minute books of the Committee of the Company of Proprietors and the Annual General Meetings. No toll records or accounts of any kind have survived. Even so, from that evidence which does exist the picture presented is a gloomy one. For most of this time the company's annual balance-in-hand was either extremely low or in deficit.¹ Cash was sought by leasing the tolls but apart from the two years, 1795 and 1806, there were no takers and they remained in company hands. A reduction of some of the internal tolls in 1802 was possibly an attempt to attract more custom but it does not seem to have worked.² In the same way additional guaranteed revenue was looked for in the leasing of the wharf and warehouse after 1803. The company-appointee, Thomas Rodgers, left and the new lessees came in on payment of a fixed annual sum.

Why were the annual balances-in-hand so small and why the necessity to lease, or "farm", the tolls and duties? Why would the wharf and warehouse be taken and not the tolls? The answer lies not with the Sleaford Navigation or its management but with the state of the navigation on the River Witham.

1 See Appendix N.

2 The reduced rates were:

i) From Sleaford to Apple Tree Nest (just south of Flax Dyke) and places about it = 1/- per ton.

ii) From Sleaford to Holland Tunnel = 1/6d. per ton.

This state made it difficult for vessels to sail along it, particularly that section between Chapel Hill at the eastern end of Kyme Eau and Lincoln, or more properly, Stamp End Lock. Difficulties in sailing and restrictions on the amounts carried due to the shallowness of parts of the river lowered toll receipts. In this uncertain condition speculators were not willing to invest large sums in order to take the tolls on vessels sailing to or coming from Sleaford.

But what had happened on the Witham to create this situation? The Drainage and Navigation works to Lincoln had been completed in 1788 and it was on this basis that the promotion of a Sleaford Navigation had been encouraged. The answer lay in the fact that these works were not completed and therein lay the financial problems of the Sleaford.

For a start there was the Lincoln High Bridge - Fosdike Canal link still to be made and then, early in the new century, the drainage of East, West and Wildmore Fens which lay on the eastern side of the Witham between Boston and the Horncastle Navigation. And really, it was in this southern section of the Witham that most of the main improvements had been carried out between 1762 and 1788 - the river embankments did not extend all the way to Lincoln but ended north of Carlton Dyke. North of Chapel Hill the river had begun to decay and silt up, so obstructing traffic, just as it had done many times before in previous centuries. Large traffic could still use it but with difficulty.

As the progress of the Sleaford Navigation was ultimately dependent on that of the Witham it would be well to mention what took place in this respect.

Although the Sleaford Navigation was feeling the effects of the poor trading situation, it was another financially-involved group which took the first steps to rectify the position. At their Boston meeting of September 30th. 1802. the Witham Navigation Commissioners

received a deputation of several merchants from the Borough. The minutes tell the story,

"A representation having been made to the Commissioners by several merchants of the town of Boston stating that it is probable, from various causes, that if the Navigation of the River Witham was rendered safe and certain at all seasons, a very large proportion of the trade that now passes from the Staffordshire canals would be carried by the Witham through Boston to London.... "

It was decided that an approach should be made to the engineer, John Rennie, to report on the state of the river and its navigation.¹

¹ In the past the Commissioners had turned to William Jessop whenever advice was needed on drainage or navigation matters, but now they asked Rennie. He was to dominate as consultant engineer on the Witham for the next quarter of a century. The reason for his appearance may be the result of events which took place eight years before, in 1794. Sir Joseph Banks had great influence with both the Witham Drainage and Navigation Commissioners and, in 1794, was actively engaged in finding a resident engineer for the Horncastle Navigation. He first approached Jessop, who recommended someone completely incompetent, William Sawley. Banks may have held this against Jessop (it may have been Banks who vetoed Jessop's election to the Royal Society) for he then asked Rennie to find a replacement. Rennie took great pains to secure someone capable and, although his choice did not take the post, Banks wrote to him,

"I am sensible ... of the value of your friendly exertions made, as they have been, for me with vigour and alacrity and shall always consider myself as under an obligation to you of weight and value."

SGS BS 18/9. Undated, but between 22.2.1794 and 23.3.1794.

Could Banks have remembered this and made his recommendation to the Witham Commissioners accordingly?

Rennie's report¹ was made to the Commissioners on January 6th. 1803. Most of it dealt with drainage but the navigation aspects give a detailed picture of the Witham at that time. As far as the Sleaford Navigation was concerned, Rennie confirmed that water access to Boston was adequate. At the confluence of Kyme Eau with the Witham the water depth was 5', deepening to 8' 6" at the Grand Sluice at Boston. However, towards Lincoln the depths decreased rapidly to between 1' 9" and 2' at Harlings Lock, near Bardney. This deposition produced a very low hydraulic gradient and an explanation for this was given by Rennie,

"... I found the gates of the Grand Sluice completely blocked up, there being about 10 feet of silt on their sill, and no water passing ... The River, therefore, in this state, may be considered nearly as a Canal."

Of the lock at Kirkstead, which the Sleaford company had helped finance, he remarked that it was badly sited and very poorly built and,

" ... whatever scheme of improvements may be adopted, it must be removed and another built in a better situation."

One can imagine the reaction of the Sleaford Committee to that observation!

Rennie's scheme was to secure a more regular flow of water down the Witham - water which was at that time being used by the Fosdike Canal and particularly by the lock at Torksey into the Trent. To achieve this end he made a number of recommendations, which included,

¹ Witham Drainage File, Item 12, Boston Reference Library. A map to accompany the report was made by Anthony Bower in 1803 (Wheeler Map Collection, Map 30, Boston Reference Library). See also, Map K.6.23, "Catalogue of the manuscript maps, etc in the British Museum", vol.1. 1844. and British Library canal maps, 4E, 13-15; II 40; II 41; III 81; III 82; III 192, 193, 194.

completing the embankment of the Witham as far as Lincoln, deepening and straightening the river and removing the locks and staunches at Kirkstead and Earling's Bau and rebuilding them. The ones then existing were deficient and the weirs and staunches in particular did not allow sufficient water to pass and so the scouring effect of them was lost. He also recommended turning the Witham down its original (pre-1762) course in summer, which would tend to keep the Grand Sluice open and prevent the accumulation of large quantities of silt in Boston Haven.

The estimated costs of these works was £58,400.

Rennie said later¹ that while making this survey he saw the advantage of having a constant height between Boston and the Trent but did not recommend it as he had received no instructions to make a survey and report on that principle. As far as his survey went, it only put the Witham on a dead-level from the Grand Sluice to Stamp End Lock at Lincoln.

Nothing was done. Rennie's works were not acted upon but they were not forgotten. The probable reason for the inactivity was that there was insufficient money with which to carry out the work.

A new estimate for the scheme was made in 1806 by Anthony Bower,² a Lincoln engineer. As well as raising the estimated amount to over £92,000, he gave his approval to the plan,

"The present Scheme has many decided Approbations ... the Navigation will be complete and the Facility of Vessels passing along the same very much increased, as no Time will be lost in passing through the Locks, from Staunches, Locks or Weirs; in short, this is the only Method of making Navigation and Drainage compatible."

¹ Witham Drainage File. Item 17, Dated April 28th. 1807. Boston Reference Library.

² Ibid. Item 13a, dated November 11th. 1806.

Soon after this estimate was published the Witham tolls came up for auction. While the state of the Witham as a navigable river was not good it, nevertheless, did allow vessels to sail along it and bidders for the tolls were forthcoming. On December 27th.1806. they went to a John Keyworth¹ and Edward Fowler for £2,610 per annum for a three-year period, beginning on the following March 25th.

Rennie had been asked to examine Bower's estimate and make any recommendations which he saw fit and his new estimate appeared in a report of the Drainage Commissioners' meeting held at the "Angel Inn", Sleaford on April 2nd.1807.² His revised estimate totalled £106,720, of which he suggested that £16,000 could be saved if Stamp End Lock was moved nearer to Washingborough Ferry.

The renewed interest in the scheme was possible as a fresh source of finance was anticipated - the funds of the Drainage Commissioners being "considerably increased", to use their own term, from the additional acre tax which would come from the part-enclosure of West and Wildmore Fens, a further work which had been surveyed by Rennie.³ Even more money was expected when this enclosure was completed. A tollage change was also contemplated on the Witham.

The Commissioners' opinion was that as the costs of freightage would be reduced by the improved state of the river, the tolls could be raised to,

- i) 1d. per ton per mile for any distance over 6 miles, and
- ii) 6d. per ton per mile for any distance of less than 6 miles.

1 He was a lessee of the Sleaford tolls in the 1820's.

2 Witham Drainage File, Item 16. Boston Reference Library.

3 Rennie's plans for the drainage of East, West and Wildmore Fens were carried out between 1803 and 1807. The water from these Fens was led to the Hobhole Drain (cut 1805-6) and so into the Witham outfall below the Grand Sluice.

The proposals, as suggested by Rennie, were not unanimously accepted and doubts as to their practicality were voiced by many, but in particular the landowners on either side of the Witham below Lincoln. Consequently, the Drainage Commissioners instructed him to prepare a defence of his plan.¹ This he did, in the form of a letter to the Commissioners, which was then published.² His references to the Sleaford Navigation were confined to the improvements which would come in land drainage below the Bottom Lock in Kyme Eau, so making fewer wind-machines necessary. In this letter Rennie ranged wider than the Witham river and advocated improvements to Boston Haven, that part of the Witham below the Grand Sluice. He referred to the silt accumulations there and he saw an additional bonus coming from his proposed Witham works for,

"Nothing essential in the way of Scouring Boston Haven in its present State, can be effected, but by a Flood passing through it with Rapidity, as will be the case when the Witham is enlarged and embanked as is proposed."

This was seen as the final step necessary to complete the work of centuries and make the whole river a certain navigation at all times³ and bringing with it the inevitable financial and material benefits,

"... for if Vessels of large Burthen could be brought to Boston, and at a cheaper Rate than smaller vessels now are; not only would the Merchants and Traders there be greatly benefited but the Country would likewise share in it, by having their Produce sent cheaper to Market, and Articles wanted for their Consumption imported at a cheaper Rate."

1 Directive dated, September 19th, 1807. Witham Drainage File, Item 19.

Boston Reference Library.

2 Ibid.

3 Not achieved until 1895 after the Witham Outfall Act of 1880.

With Rennie's scheme and his reply to objectors ready, the joint Commissioners decided that the time was right to make application to Parliament¹ for an Act to put the plans into effect and, by so doing, executing in full the provisions of the 1762 Witham Act.

That was how, in January, 1808, the situation regarding the future for the drainage and navigation functions of the main waterway of the region was seen and it brings us back to the reference in the Sleaford minutes, quoted above (p.151), with reference to Mr. Chapman's report.

It must have been very soon after the decision to apply to Parliament for an Act that the "Proprietors of Lands in the Townships of Blankney, Martin, Timberland, Timberland Thorpe and Billingham Dales" (to give the proprietors their parishes, which were omitted from the Sleaford minutes) contacted William Chapman to give his opinion of the proposed works. Rennie's assurances in his answer to their anxieties do not seem to have satisfied everyone and an outside, second opinion, had been requested.

This William Chapman was probably no stranger to the Witham as it is most likely that he was the same person who was the author of the pamphlets which dealt with the state of the Witham in 1800.²

The proprietors put five questions to Chapman for consideration. Four related directly to the drainage of the affected parishes while one, the third, related to the effect of the proposed works on the Navigations - the Sleaford and Horncastle as well as the Witham.

1 At a meeting at Sleaford Town Hall on October 27th. 1807. Witham Drainage File, Item 18, Boston Reference Library.

2 Chapman's report to the proprietors was dated, January 14th. 1808. Witham Drainage File, Item 20. Boston Reference Library. All the mentioned parishes adjoin the Witham on the west and are north of Kyme Mau. For Chapman's other pamphlets, see pp 18 & 20.

Chapman recorded that he had spoken to the lock keeper at the Bottom Lock (this would have been James Beeden) for it was only that section of the Sleaford between there and the Witham which could be affected. He wrote,

"At the lowest lock in Kyme Eau the Lock Keeper showed me the highest Flood Mark; it was within a Foot of the Level of the Upper Pond. In all Probability Spring Tides, or even great Floods from the Country, may flow still higher; therefore the Banks of the Upper Level should be raised to the necessary Height and also to permit the deposit of Silt in that Level, there should be fixed either in the Head of, or above the Lock, a Pair of Gates pointing downwards to keep out extraordinary Tides."

Chapman's criticism, if such it was, of Rennie's plan was that its recommendations regarding the Grand Sluice itself did not go far enough. He advocated an extension in the opening to 119' to produce a greater scouring effect in the Haven.

Chapman's conclusions as to the likely effect on the Navigations joining the Witham were noted in the Sleaford minutes,

"In this Case,¹ as the Embankments below their lowest Locks are proposed to be raised, the Great Navigations of the Kyme Eau and the Bane²... will remain as they are."

This report satisfied the Sleaford Committee,

"It appears, therefore, to this Committee by Mr.Chapman's report that the deepening of the Witham will not affect this Navigation."³

¹ The case being, leaving the Grand Sluice as it was.

² That is, the Horncastle Navigation.

³ Sleaford Navigation Committee minutes, February 9th.1808.

This satisfaction was, however, only with the technical questions of water management. A new worry was raised when the draft Bill was seen.

The Navigation Commissioners had already indicated their desire to raise the rate of toll on the Witham and in this increase they included vessels travelling to and from Sleaford. As the tolls then stood, according to the Sleaford Navigation Act, a rate of 9d. per ton was being charged on all merchandise passing either way from Lincoln or Boston to and from Sleaford. The Sleaford minutes express the apprehension,

"... Meeting ... adjourned to the George Inn (on the 9th. next at 3p.m.) to take into further consideration the Bill now depending in Parliament for rendering more mutual the Witham Act and in the meantime the clerk do represent to Mr. Handley the injury this Trust¹ will sustain by the intended additional toll."²

No further reference to this appears³ although it can be stated that nothing came of any objections which might have been raised, for the additional toll on Sleaford goods was incorporated in the Witham Act of 1808.⁴ The toll which was now required by the Witham Navigation was the original 9d. per ton on all goods carried on the Sleaford and Horncastle Navigations ,

"... carried or conveyed through or upon any part of the River Witham, together with a further toll of one-half the amount then paid on the Witham."

1 Here the Sleaford Navigation is using this term incorrectly.

2 Sleaford Navigation Annual General Meeting minutes, May 3rd, 1808.

3 The first volume of the Sleaford Navigation Committee minutes ends in April, 1808. The minutes from then until 1825 have not been found.

4 48 Geo. III. cap. 108. Clause 27, pp. 2119-20. "The River Witham and District Acts" Item 3. Boston Reference Library.

The Act authorised the raising of £70,000 but this sum could not be realised. A further Act was obtained to meet this financial problem. The toll rates remained unaltered.¹

Problems with the 2nd. District Commissioners.

For all the opposition to the scheme of navigation which was raised by the 2nd. Witham District Drainage Commissioners before the Sleaford Navigation Act became law, there was surprisingly little conflict after the works became operative. The contretemps of the construction era have been noted but little documentary evidence exists to show that it continued after 1794. Naturally, the interests of one party would occasionally conflict with those of the other but this did not happen frequently. However, the two sources of possible conflict, the tunnels and the southern embankment of Kyme Eau, did present some problems.

The tunnels through the banks caused the greatest concern, as might have been expected, although the Navigation had been operating for over 4 years before the first complaint was made. When it did come the Navigation did not record it and only the 2nd. District minutes carry any reference and even this would seem to be inaccurate for they state that most of the tunnels in Kyme Eau which were within the 2nd. District had been lowered by as much as 11" since the passing of the Sleaford Act, "... to the depreivation of water ..." to the Holland Fen area. Surely, if the tunnels were lowered an increased supply of water would result, as was the case observed in 1810.

¹ 52 Geo. III. cap. 103. p. 2302, "The River Witham and District Acts", Item 4. Boston Reference Library.

² Minute for August 1st. 1798. B SIDE 2. Lincoln Archives.

"... the south bank of Kyme Eau on each side of Dampford tunnel, for the space of one hundred yards, is much lowered by the tread of horses and cattle and ought to be heightened for the better protection of Holland Fen."¹

Returning to 1798, William Bonner, now back in his original capacity as surveyor for the Witham General Drainage Commissioners, was sent to look at the problem.² The 2nd. District minutes say that his report is, "... to be inserted in this book immediately."³ It is not there!

Holland Tunnel and the area of bank adjacent to it was occasionally the subject of repairs. The Navigation was stopped for repairs for a month from September 10th. 1804⁴ but a problem with this bank must have arisen suddenly just after the works were reopened as it was,

"Ordered that our surveyor do forthwith sufficiently repair the banks of Kyme Eau on both sides of the Holland Tunnel lying through the south bank of Kyme Eau near Dampford Sluice."⁵

The Navigation records a similar situation at the same spot less than two years later when John Peacock and Thomas Rylatt were instructed to superintend the works then going on at Holland Tunnel and ensure that they were conducted without injury to the Navigation.⁶

1 Minute for October 3rd. 1810. BSIBB 2. Lincoln Archives.

2 Ibid. Minute for August 15th. 1798.

3 Ibid. Minute for August 29th. 1798.

4 "Lincoln, Rutland and Stamford Mercury" for September 7th. 1804.

5 Minute for October 24th. 1804. BSIBB 2. Lincoln Archives.

6 Sleaford Navigation Committee minutes, July 7th. 1806.

A final reference of this period to the Holland Tunnel illustrates the use of the provision in the Sleaford Navigation Act for the 2nd. District to instruct the lock keeper at the Bottom Lock to turn water when drainage matters were involved. From the Commissioners' records it would seem that they did not order, but asked, the lock keeper to run off the water in Kyme Eau until it was low enough for repairs to Holland Tunnel to be carried out.¹

Trade on the Sleaford Navigation, 1794-1808.

Of all the aspects of the development and growth of the Sleaford Navigation the most difficult to assess accurately is the trade which was carried on along it. The main difficulty lies in the fact that details of cargoes have not survived and neither have records of the toll amounts collected on the river, at least not until 1851. For the period up to this date all that does exist of this type of material are the monetary amounts paid to the Navigation company by the lessees of the tolls in payment for those same tolls. At no time, however, is there to be found in any so-far discovered documents a break-down of these summary totals into the types of merchandise actually carried.

This being the case, the most that can be attempted with the present state of knowledge is to try to discover the main types of cargoes carried and the carriers.

a) Types of cargoes carried.

From the time of the promotion of the Navigation under Benjamin Handley in 1781, the conception had been that trade would be with the Midland counties of England and Yorkshire. To these areas would be supplied the agricultural produce of Sleaford and the surrounding district, essentially consisting of cereals of various types and,

¹ Minute for July 3rd. 1799. BSIDB 2. Lincoln Archives.

in return, coal would be received. Primarily this would be for domestic use but it would also serve to fuel the small industries of the town, such as brewing. In his letter of December 6th, 1791 to Sir Joseph Banks,¹ Benjamin Handley remarked how the Navigation would be taking Yorkshire keels. Also the plans for the locks on the Navigation had been altered in order to build larger ones in June, 1792. so that the larger vessels trading on the Trent could reach Sleaford, which would come with the increase in the size of the Trent Navigation locks, the construction of which was then being begun.²

Probably one of the earliest documents printed on behalf of the Navigation was a schedule of "what made a ton"³ - a list of commodities, animals, etc., and the number of such which would weigh approximately one ton. This would have been used as a rough guide to the weight of cargo being transported and so provide an approximate check to the toll collectors that the masters of vessels were not evading tollage. A large number of commodities are mentioned on this list and it is unlikely that it provides any real clue to the actual trade carried on. It was probably prepared with the idea that it could be used to cater for any possible traffic which may have been on the boats rather than issued in the knowledge of what was actually being, or going to be, transported.

The early mentions of corn and coal intending to be carried can be confirmed from later references. Dealing with corn first, a most specific reference occurs in a collection of notes and writings⁴

1 See p.57.

2 See p.113.

3 See p.166.

4 Cragg 1/1 and 1/2 (microfilm) Lincoln Archives.

The Sleaford Navigation "What Makes A Ton" Schedule.

Sleaford Navigation.

AN ACCOUNT or SCHEDULE of the several GOODS, WARES, and MERCHANDIZES, which are to be taken and considered as a TON, and to pay TOLL accordingly.

QUALITY.	QUANTITY.	TONS.	QUALITY.	QUANTITY.	TONS.
Coals, - - -	1 Chaldron, -	1	1 hatch Reed,	5 Hundred,	1
Oats, - - -	10 Quarter, -	1	Grocery, -	2 Hogheads	1
Barley, - - -	6 Quarter, -	1	Latten Reed,	250 Bunches,	1
Malt, - - -	10 Quarter, -	1	Soap, -	2 Hogheads,	1
Wheat, - - -	5 Quarter, -	1	Wood, -	1 Hoghead,	3 qrs.
Beans, - - -	5 Quarter, -	1	Spetches, -	8 Packs, -	1
Peas, - - -	5 Quarter, -	1	Squares at 9 Inches	250 -	1
Rape, - - -	5 Quarter, -	1	Sheep, -	Twenty,	1
Bark, - - -	10 Quarter, -	1	Porter, -	6 Barrels,	1
Whole Lime, -	1 Chald & half	1	Flour, -	8 Sacks, -	1
Sleck'd Lime, -	2 Chaldron,	1	Seed, -	5 Quarter,	1
Potatoes, - -	130 Pecks, -	1	Hay, -	20 Hundred, -	1
Lime Stone, -	4 Hogheads,	1	Glaſs, -	7 Whole Crates	1
Timber, (Oak, } Aſh, & Elm) }	40 Feet, -	1	Hemp Seed,	40 Strike, -	1
Fir Timber, -	50 Feet, -	1	Poſts 4 and half	120,	1
Bricks, - - -	5 Hundred, -	1	Coak, -	100 Strike, -	1
Flat Tile, - -	1 Thouſand,	1	Pavements,	3 Hundred,	1
Pan Tile, - -	5 Hundred, -	1	Stone, -	16 Feet Cubic,	1
Oil Cakes, about } 6lb. and half } a Pair. }	1 Thouſand,	1 & half	Paving Stone,	10 Superf. Yards.	1
Larger Cakes in } Proportion, }			<p align="center"><i>N. B.</i> ALL other Articles not mentioned in the foregoing Liſt to be ſubject to 2s. per Ton of 2240 Pounds, to be aſcertained either by Weighing or Draught of Water.</p>		
Wine, - - -	2 Pipes, -	1	<p align="center"><i>B. CHEALES,</i> Clerk to the Company.</p>		
Felloes, - - -	120 -	1			
Seven Feet Poſts,	Sixty -	1			
Six Feet,	Eighty,	1			
Five Feet & half }	Ninety,	1			
Single Deals, -	Half Hundred	1			
Double Deals,	QuarterHund.	1			
Battens, - - -	1 Hundred	1			

(Reproduced from "Canals of Eastern England" by J. Boyes & R. Russell, D & C, 1977).

relating to various parishes in the Sleaford district and compiled at the turn of the 18th. century. In this it is stated that, once the Sleaford Navigation was operating, the whole of the corn crop of South Kyme was sent away from the township by barge.

The corn trade must have been of great importance as the mills along the Mill Stream were functioning¹ and corn was an important commodity for sale in Sleaford market. That corn was exported from Sleaford itself is stated in a company minute,

"Ordered that our clerk do give notice to the lock-keeper at Fox's Lock that, from and after next Lady Day, he is not to permit any person conducting a boat or vessel laden with corn from Sleaford to pass without producing a certificate of the burden from the person who put the cargoes on board."²

Two facts emerge from this entry. First, it would seem to have been necessitated by evasion of tolls on the part of some boatmen and, second, if quantities of corn were coming from Sleaford there should be mention of it in documents relating to wharf storage, as this must have been provided.

An examination of the contract entered into by the lessee of the wharf, yard and warehouse shows that corn played this major part in the trade of the Navigation and, consequently, the profit of the lessee. Taking the contract of April, 1808 as an example,³ special provisions were made for the storage of corn without mentioning

1 Corn can be seen being taken into the mill on the turn-round cut in the print of 1798, reproduced on p. 168.

2 Sleaford Navigation Committee minutes, March 9th. 1807. Such a ticket, the only one known to exist, appears on p. 168a.

3 Sleaford Navigation Committee minutes, April 16th. 1808.

The Binerant.



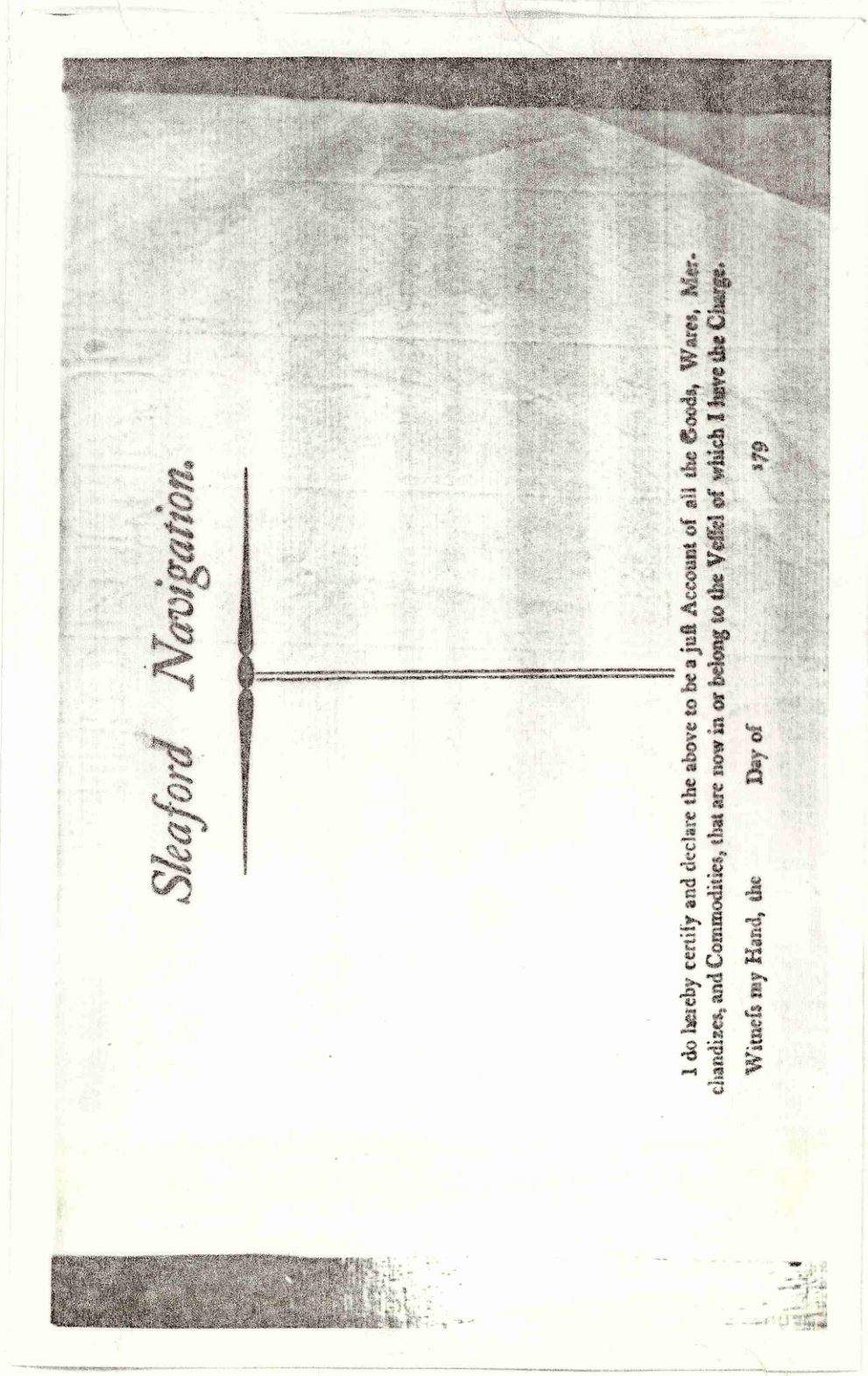
Engraved by J. Miller from an Original Drawing by W. Dawkins Esq.

Published & sold by J. Miller & Co. Runcorn Street, London.

SLEAFORD.

An illustration of the turn-round cut in Sleaford, 1798.

Fig.15



A Sleaford Navigation toll ticket.

Fig.16

specifically any other commodity, so indicating the particular place it occupied in the trading situation. To begin with, it is mentioned directly amongst a list of general goods and then special rates of wharfage are applied to it alone, under definite circumstances,

"But, if such corn shall be lodged at the said warehouse and taken out without going or passing on the Navigation, then 6 pence per week per quarter shall be paid ..."

Here the wharf is being used as a temporary store for the corn brought to market by waggon from the immediate neighbourhood and later moved out again by the same means of conveyance. There is also some later evidence that the movement of grains to Grantham was made by land and the above reference could apply to corn going to the same destination.¹

The movement of corn on the wharf was also the subject of another special provision in this contract with, again, no mention of the same being applied to the other commodities,

"The wharfinger's porter will be entitled to 1d. per quarter for corn taken in the warehouse and the same rate for measuring out, whether his assistance is required or not and the persons to whom the corn belongs are to find the assistance of one man to help in loading and unloading the same."

Included with each contract made for the wharf premises during this period was a schedule to which the lessee had to adhere. This, more than the "what makes a ton" document, is of greater relevance in telling the nature of the actual goods handled on the Navigation. An example of the full schedule is given elsewhere, but a list of the commodities it contained will suffice here to give an idea of

¹ Mentioned in "Brief to the Promoters of the 'Boston, Sleaford and Midland Counties Railway' " 1853. British Transport Historical Archives, RAIL 1066/306.

this trade.¹ Apart from corn, a tern divided into wheat, barley and oats in the schedule, is wine, perry, cider, tea, hops, rice, fruit, salt, malt, flour, oil, seeds, nails and coal. A general statement of payment by weight covers all other items.

Because it has been left until last it must not be imagined that coal was of any less importance than corn. It was on a par with corn as a fundamental commodity in the company's trade and the importation of this into the Sleaford area was a basic part of the Navigation's viability. From the first it was seen as being as vital as the corn trade, which accounts for the coalminer and the agricultural labourer being the supporters of the company coat-of-arms.

Evidence of the coal trade is legion. Coal from Yorkshire in particular was being brought from the Trent to Lincoln and Boston via the Witham. It is obvious that the towns of the surrounding district and connected with the Witham by their own navigable waterways (primarily Sleaford and Horncastle) should share in this trade. Even with the unimproved state of the Witham at the end of the first decade of the 19th. century, large quantities of coal were being delivered to Boston for trans-shipment to coastal and ocean-going vessels en route for London and western Europe. In 1811, 12,722.75 chaldrons (453,319 bushels) and, in 1812, 14,929.75 chaldrons (537,471 bushels) passed through the Grand Sluice from the Witham Navigation into Boston Haven.²

On September 30th.1803. the following appeared in the "Lincoln, Rutland and Stamford Mercury",

"Sleaford Canal Co's wharf is now made free for all goods not warehoused, coals, corn and timber excepted."

¹ See Appendix Q.

² Figures quoted in P.Thompson's "History of Boston", Boston,1856.

Thus, coal was reaching Sleaford and it must have come by water. This advertisement is also of interest as the term, "Canal" is used for what was, after all, a "Navigation". This term occurs a number of times in the official documents of the company throughout the period of its existence.

An earlier reference to coal than this 1808 one occurred in 1797 during the wharf lease of John Blundell of Lincoln. He was most likely connected with the coal trade for, as a concession in his contract, he was allowed wharfage for his coal free.¹

Facilities were provided at Sleaford for the storage of coals. When John Preston of Sleaford applied for the wharf lease in 1803 the company minutes noted that he applied,

" ... to take the warehouses² and coalyards upon the wharf..."³

The most important reference to coal comes in 1807 and concerns the equivalent of a toll reduction on that commodity. The reason for this is nowhere stated but it could have been introduced in an attempt to increase coal sales in Sleaford as a lower toll charge would, or could, enable a lower selling price to be charged in the town. What is certain is that this reduction took place at a time when annual profits were very low - too low to produce a dividend - and any scheme which would lower them still further would have been avoided. To reduce the tolls on a basic item of trade, like coal, would have been financial suicide unless there was a positive motive. The toll regulation was,

" ... the rate shall (for every 25 hundred of coal, so on, proportion charged and paying due in passing on the

1 Sleaford Navigation Committee minutes, September 11th.1797.

2 There was only one large warehouse on the wharf but there would have been additional storage sheds.

3 Sleaford Navigation Committee minutes, May 9th.1803.

River Witham) on passing upon this Navigation, be considered 21 ton and a half and the tonnage to be paid at and after that rate accordingly."¹

b) The vessels used.

Turning now to the vessels which carried this trade, on May 5th. 1795 an Act of Parliament was passed² which had the object of registering all vessels which operated on the inland waterways of the kingdom. Some of these registers have survived and a recently discovered one, called the "Lincoln Boat Register"³ allows a partial reconstruction to be attempted of those vessels plying their trade on the Witham and to Sleaford during the first 15 years or so of the Sleaford Navigation's life. The picture is incomplete for although all boats were supposed to register many did not do so and are, therefore, not found in the listings.⁴

The Lincoln Boat Register contains a total of 163 entries covering the period from August, 1795 until October, 1807.

With Lincoln as the centre and a point of trans-shipment, the pattern of trade from this part of Lincolnshire was concentrated on a number of specific locations.

A quarter of all registered boats traded with Wakefield (27 vessels) on the Yorkshire Coalfield and with that area of Derbyshire which goes under the title in the Register of the "Chesterfield Collieries"(19).

1 Sleaford Navigation Committee minutes, June 29th. 1807: Not an uncommon type of reduction on canals, e.g. the Aire and Calder did the same thing. If it did not produce the desired result it was easier to revert to the old, higher rate than to raise the price again.
2 35 Geo. III. cap. 58.

3 L1/5/9. Lincoln Archives.

4 One such vessel is that of Mrs. Mary Bilton, see advertisement on p.1 of "Lincoln, Rutland and Stamford Mercury" of February 7th. 1809.

From both these places coal would have been brought to Lincoln and agricultural produce sent in return. Additional Yorkshire towns which were in regular trade contact with Lincoln included, Leeds(14), Halifax(8), Rotherham(5), Huddersfield(2), Hull(2), Bradford(1) and Knottingley(1).

The agricultural produce which would have gone to these centres of population would have, in part, come from the lands under cultivation south of Lincoln. Boston was a collecting centre for, in particular, corn, and 24 boats are noted as usually trading between Boston and Lincoln only. Thus, corn would have been taken to Lincoln and coal brought back. Some of the Boston boats traded directly with Yorkshire and, like Lincoln, the greatest number went to Wakefield(8). Huddersfield(2) and Chesterfield ("Collieries"=1) were also in communication with Boston.

23 of the Lincoln-based vessels had Yorksey as their usual terminus. Here, at the junction of the Fossdike and Trent Navigations, trans-shipment of goods would take place. 2 Boston boats also traded to here.

From Yorksey most of the registered vessels turned northwards on the Trent - only 2 are listed as going south, 1 to Nottingham and the other to Shardlow, a major route centre of the canals of the east Midlands.

A total of 10 boats can be seen from the listings as usually sailing to Sleaford. This figure is readily divided into two groups; those engaged in local, short-haul traffic and those travelling outside the Witham-Fossdike system. There are 6 in the first group and 4 in the second. A complete listing of these vessels is given on p.174.

The details given in the Register about boat-owners do allow some conclusions to be drawn which may have a relevance in the understanding of those groups of people who leased the Sleaford wharf and warehouse

Vessels known to have been trading with Sleaford, 1795-1807.

(details from the "Lincoln Boat Register", L1/5/9, Lincoln Archives.

Group 1						
<u>Reg. No.</u>	<u>Boat's Name</u>	<u>Type</u>	<u>Ton¹</u>	<u>Date</u>	<u>Where Trading</u>	<u>Owners</u>
7	"Industry"	Ketch	29 ¹⁷ / ₉₄	8.'95	Lincoln	Rich. & Peter Harrison, Lincoln
14	"Speedwell"	Keel	25 ⁵² / ₉₄	8.'95	Lincoln	Wm. & Geo. Hall, Lincoln.
29	"Betsey"	Keel	29 ⁷⁷ / ₉₄	8.'95	Lincoln	John Elliott, Lincoln.
75	"Industry"	Keel	21 ¹⁵ / ₉₄	8.'95	Lincoln	Geo. & Wm. Rylett, Bardney.
111	"John & Maria"	Lighter	18 ⁵⁹ / ₉₄	2.'96	Lincoln	John Elliott, Lincoln.
119	"Speedwell"	Keel	25 ⁵² / ₉₄	2.'97	Lincoln	Robt. Sharpe, South Kyme. ²

Group 2						
56	"Union"	Sloop	46	8.'95	Leeds	Kirtch, Brittain, ³ & Co., Sleaford.
108	"Good Success"	Keel	34 ⁵² / ₉₄	10.'95	Leeds	John Handsworth, Trusswell, Notts.
130	"Faith & Samuel"	Keel	31 ⁸² / ₉₄	1.'99	Halifax	Faith Eastland & Cassandra Hall, Lincoln
132	"Nonsuch"	Keel	38 ² / ₉₄	5.'99	Halifax	Wm. Harrison & Thos. Squires & John Ledgerd, Sleaford.

1 From 1773 to 1836, merchant vessels' tonnages were computed to the formula, $\frac{(L - \frac{3}{5}D) \times B \times \frac{1}{2}B}{94}$ = tonnage (13 Geo. III. c. 74), where L=length of keel and D=breadth. See "The Mariner's Mirror" vol. 44, pp. 257-8, 1958 also ibid. pp. 173-180, vol. 52, 1966.

2 This is almost certainly the same vessel as no. 14 but with a new owner.

3 This entry shows the freight-carrying commitment of William Kirton in addition to his role as a banker.

and yard at about this time.

The earliest known lessee was Messrs. Harrison and Squire (see p.148). It is not known where these two men lived but both names, William Harrison and Thomas Squire, and both of Sleaford, appear with boat entry 132 (see p.174). The Sleaford company minute recording their occupancy is for September 11th.1797 while the boat register entry is for May,1799. These two dates are sufficiently near one another to conclude that these were the same people in both cases.

The Harrison and Hall partnership, noted as taking the wharf, etc. in 1808 is known to have consisted of William Harrison of Sleaford (most likely the same Harrison as was in partnership with Squires) and Thomas Hall of Lincoln. This Thomas Hall may well have been a relative of the Halls found in entries 14 and 130 in the register. It is certain that this Thomas Hall was in the water-borne freight-carrying trade with William Harrison as the "Lincoln., Rutland and Stamford Mercury" for September 30th.1808 stated,

"Harrison and Hall's vessels leave the wharf¹ regularly each week for Boston and Lincoln."

Additional information regarding vessels which may have traded with Sleaford can be found in the registers of the Trent Navigation Co.² These provide similar data to that in the Lincoln register but, as a bonus, the type of cargo usually carried is also recorded. For the period up to 1812 the name of Sleaford does not appear in any of the destinations given in these registers but it is possible to make a speculation from what information is noted.

The boats can, once again, be divided into two groups, those which almost certainly traded with Sleaford, and those which may have done so. Unfortunately, only 3 vessels altogether can be recognised.

¹ Meaning the Sleaford wharf.

² RAIL 879, 67-78. British Transport Historical Archives.

In the first group the common destination-designation is, "Lincoln, etc.", or "Boston, etc.", while the second group states simply, and definitely, "Lincoln". If the boats were physically capable of passing through the 72'x15' Sleaford Navigation locks and making their way to the town, the, "etc." of the first group could well have included Sleaford (and Horncastle also). In each of these 3 entries the cargo carried into Lincolnshire from the Trent was coal and that carried in return either corn or malt. As the destination for this produce is Shardlow, to the south of the Torksey junction with the Witham-Fosdike system, the coal brought up the waterways was, most likely, Derbyshire and Nottinghamshire coal.¹ So, there were three sources from which the coal came which found its way to Sleaford - Yorkshire, Derbyshire and Nottinghamshire.²

Group 1

<u>Reg.No.</u>	<u>Load</u>	<u>Braught</u> (with 40 tons)	<u>Date</u>	<u>Owner.</u>
277	Coal to Lincoln, etc. Corn to Shardlow,	33.10"	1800	Robt. Fisher of Newark.
278	Coal to Boston, etc. Corn to Shardlow	34.20"	1800	John Ellis of Newark.

Group 2

148	Coal to Lincoln.	32.44"	1800	John Marshall of Lincoln.
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¹ Derbyshire coal would have come to Shardlow from the Derby Canal. Shardlow had breweries and boats bringing barley for malting here could also have picked up Nottinghamshire coal off the Erewash or Nottingham Canals on the way back.

² These are the 3 sources stated for the Sleaford coal about 40 years later. "House of Commons Select Committee Proceedings on the 'Boston, Sleaford and Midland Counties Railway' " June 2nd. 1853.

The function of Boston as a collecting and distributing centre for south Lincolnshire, together with the failing of these registers to provide a complete list of vessels can be seen in an advertisement placed in the November 5th, 1807 issue of the "Derby Mercury",

"Expedicious Canal Conveyance. R. Wilson and Co. thank their Patrons and inform them that their Borts go weekly between the Port of Boston, Lincs. and Shardlow near Derby, by which means Goods are conveyed to - Boston, Spalding, Deeping, Sleaford, Lincoln, Newark, Nottingham, Derby, etc. and places adjacent..."

The type of vessel which came frequently to Sleaford has been noted in the tables above. The sailing keels and sloops were the most common types to be seen on the Witham at this time and most of the keels would have been of the "Humber" variety. A contemporary print (see p.168) depicting the turn-round cut in Sleaford shows what appear to be two sailing keels making their return to the Witham.

PART SIX

TOWARDS PROFITABILITY, 1803-1825

Finances

From April, 1808 until the middle of 1825, knowledge of the activities of the Navigation is rather sparse. The primary source, the Committee of Proprietors' Minute Book has not been found and what information is obtainable about the operations of the enterprise have to be gleaned from alternative sources.

By the Annual General Meeting of 1809 the company was beginning to show a reasonable profit. Whether the company itself was taking the tolls or whether they were leased is not known but, whatever the case, at that meeting a balance-in-hand of £300 was revealed. This should have been sufficient for a dividend to the subscribers to be declared had it not been for an outstanding debt to Edward Hare, the engineer - a debt which, with interest, amounted to £290. This had been owing since 1797 and was now paid-off.

Edward Hare's was the final debt of any size which had still to be repaid to an individual who was not also a shareholder in the company. The bulk of debt-monies now remaining were due to the Sleaford Bank and the £1,000 owed to both Benjamin Handley and Anthony Peacock as individuals, monies which had been given as loans in 1795. As Anthony Peacock had died in 1809 his son, John Andrew Peacock, was to receive the repayment.

Taking the bank first, the principal of this debt was repaid in three instalments, in 1807, 1810 and 1811.¹ A total of £946 had been paid ⁱⁿ interest over the loan period of 12 years.

The money owed to Handley and Peacock was also repaid in instalments-

<u>Date payment authorised.</u>	<u>Handley</u>	<u>Peacock</u>
May 2th. 1812	£250	£500
May 4th. 1813	£400	£400
May 3rd. 1814	<u>£350</u>	<u>£500</u>
	<u>£1,000</u>	<u>£1,000</u>

¹ See Appendix D for the Navigation's account at the Sleaford Bank.

The minute reference for each of these payments mentions that they were specifically in discharge of the principal, no interest payments are noted. Some years earlier¹ Handley had been offered, and accepted, interest at 5% (i.e. £50) but there is no record of this ever having been paid to him. Likewise, any interest that was offered to and paid on the Peacock loan went unrecorded.

In order to pay off these debts the profitability of the company must have been increasing. Although it first passed into the "black" at the end of the trading year of 1799, from then until 1803 the profits, after the repayment of other loans, were trifling amounts. The Annual General Meeting of 1803 was the first when a balance-in-hand of over £100, clear of commitments, could be declared.

It was from this rather poor start that, over a very short period, balances were averaging over £600 a year by 1810 and this despite the bad harvests of that and the two previous years.

The financial position was considered healthy enough in 1810 for a dividend to be declared to be paid in 1812, the first since the 2 $\frac{1}{2}$ % of 1795, 17 years previously. How much this second dividend was to be is unknown. In the event it would seem that no dividend was paid² and this is not really surprising as the £1,000 loans to Handley and Peacock were still outstanding.

No further dividend payments were contemplated until 1815, by which time the loans had been repaid. When they did resume they were at 3% but were only paid in certain years until 1825. The trading position of the company was the obvious reason for this intermittent payment and probably resulted from factors which were outside the control of the Navigation, such as those mentioned below.

¹ In 1796.

² For the evidence of this see footnotes 2 and 3, p.242.

General conditions affecting the Navigation's profitability

During the Napoleonic Wars there was an increased demand for home-produced food and this led to a rising price for agricultural produce. The cultivation of marginal land was encouraged and was a factor in the drainage of areas such as East, West and Wildmore Fens, on the eastern side of the Witham in the neighbourhood of Chapel Hill. A further factor in this trend was that the blockade of Britain prevented food being imported and so more lands were encouraged to be brought under cultivation at home with the application of new farming techniques. Both the large and small farmer benefited from the situation although prices were aided on their upward trend by the bad harvests of 1808, 1809 and 1810. The slump in the economy in 1811 was essentially due to the bad harvest of the previous year and the consequent decline in the purchasing power of the consumer.

At a time when the general trend was for a slackening of economic life the Sleaford company showed a reverse fortune and was beginning to make quite substantial profits.

With the ending of hostilities in 1815 the farming community was faced with new problems. As Lord Ernle said, "To agriculturalists peace brought only beggary." Prices fell with the lifting of the blockade giving farmers smaller incomes e.g. from an index figure of 210 in 1814, to 154 in 1815, and 152 in 1816¹. During the war both large and small farmers had borrowed money to extend their operations and thereby take advantage of the rising prices. After the war they were faced with high rents and heavy interest on mortgages. Natural disasters continued to occur, mainly sheep rot and corn

¹ Rousseaux price indices, from "Les Mouvements de Fond de l'Economie Anglaise, 1800-1913" (Brussels, 1938), reproduced in the "British Abstract of Historical Statistics", Mitchell and Dean, C.U.P. 1962.

diseases, the result of a series of wet summers.

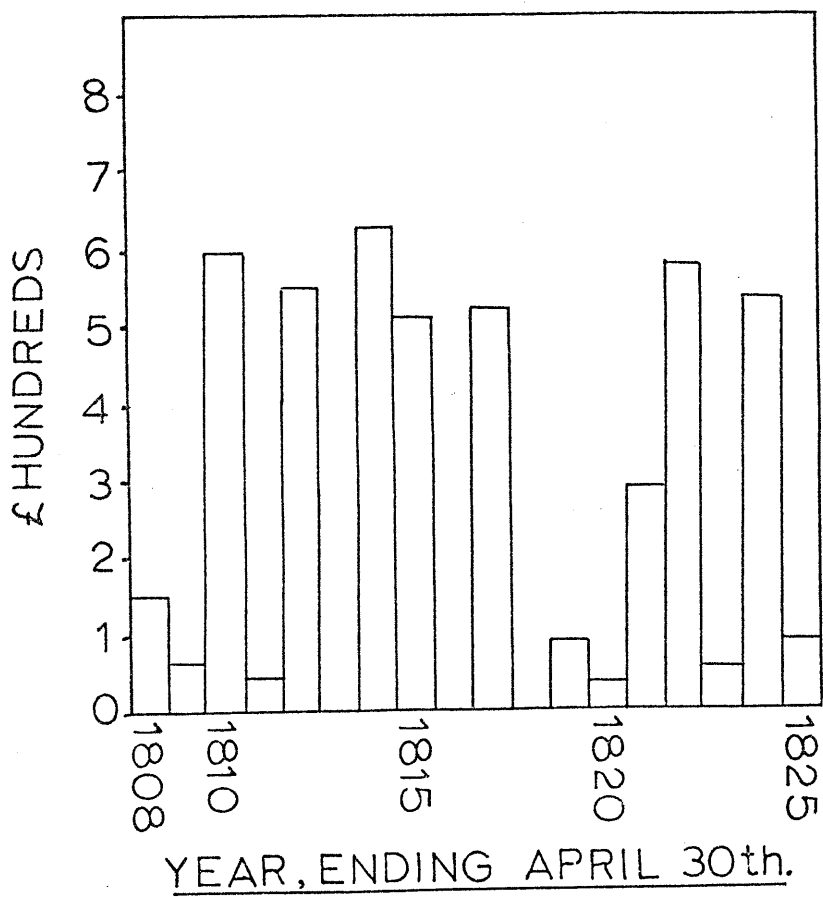
Thus, a general depression fell upon agriculture after 1815 which was felt most severely in the corn-producing areas and those with heavy, clay soils. One such area was that to be found on both sides of the Sleaford Navigation. While the lack of a trading balance for 1816 and 1818 in the company records would hardly be caused by this, the lack of a dividend for the year ending April, 1816 could well have been.

No dividend is recorded for the years ending April, 1819, 1820, 1821, 1823 and 1825. The trading balances for these years show a decline - none in 1818, £91 in 1819, £46 in 1820, £298 in 1821, £47 in 1823 and £89 in 1825. The 1821 figure of £298 may well seem out of place but it was an exceptionally low amount as it came within a period when, except for these low amounts mentioned here, the balances were all in excess of £500.

The shareholders.

In spite of the irregularity of dividend payments there was a lack of movement in the ownership of the share capital. In the accompanying diagram (p.181b.) the share distribution for 1820 is shown and bears a remarkably close resemblance to that of 1801 (p.103a.). There had been a certain amount of movement of the shares due to inheritance but Sleaford town itself and the immediately surrounding area still remained the focus. Even though in Sleaford two fewer individuals held shares, the total number held there had risen by three. The greatest change, a drop in holdings, occurred in Boston where now only two shareholders had six shares between them - one of the holders still being Boston Corporation. It is a possibility that here it was realised that the works even then going on to improve the Witham

Fig.17

BALANCES-IN-HAND, 1808 - 1825.

THE DISTRIBUTION OF SHAREHOLDERS AND SHARES IN THE SLEAFORD NAVIGATION ~as during 1820

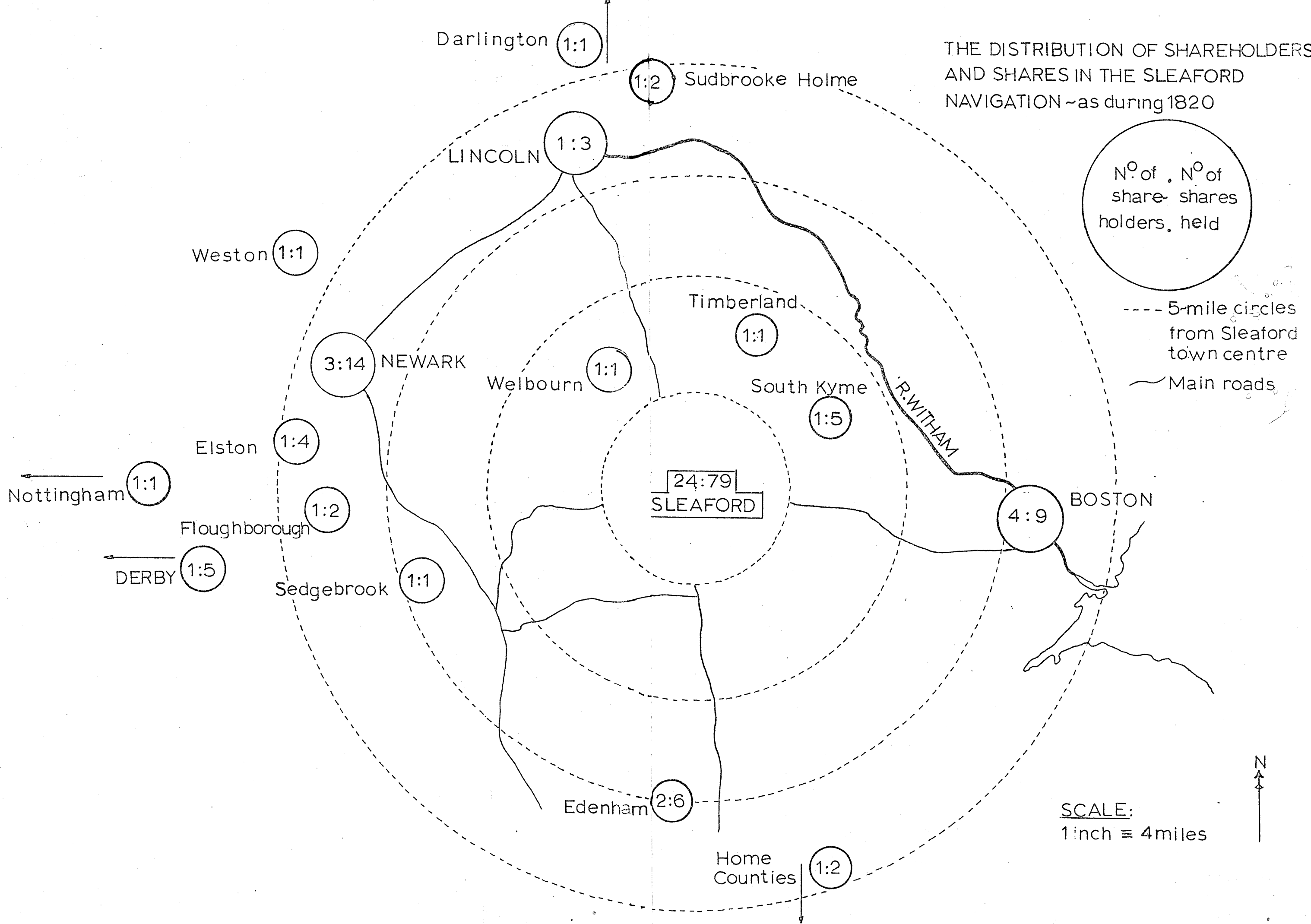
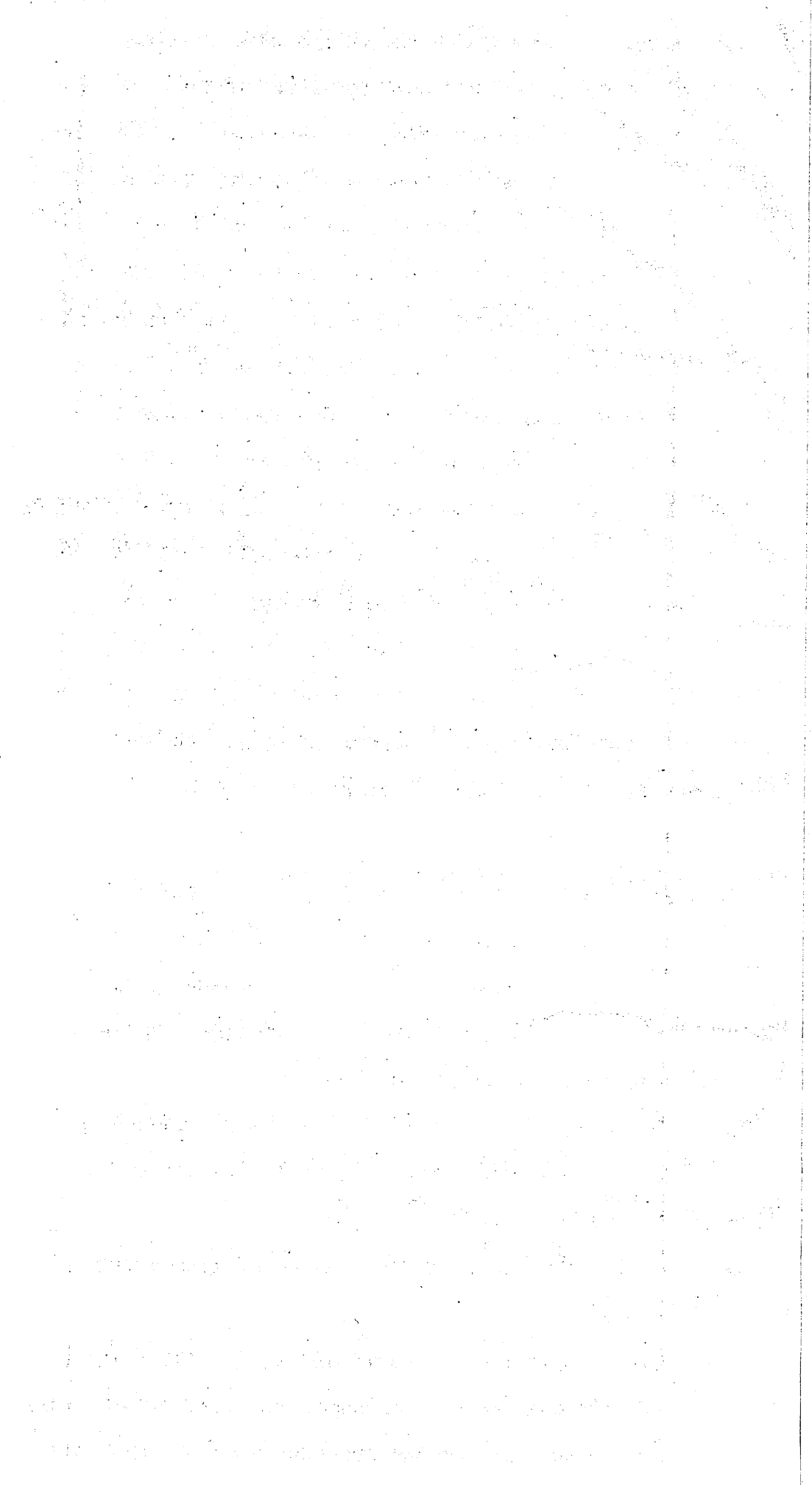


Fig.18



could only increase the chances of the Navigation's success.

That the Corporation could have sold out their holding but did not may also have been due to the knowledge of the prices realised from those which were. Before 1825 only three shares were sold, according to the company's Share Transfer Book, Nos. 60, 61 and 62, all owned originally by William Eyre of Newark. His son first put them up for sale and they were all purchased together in 1816 and then resold and repurchased again in 1817. William Eyre had not taken up the offer to raise their value from £100 to £125 each, so these £100 shares were sold for £61 each in 1816 and £60 each in 1817. If Boston had sold a quite large financial loss would have been incurred. The general economic climate of the time rather than that affecting the Navigation specifically probably accounted for these low figures and the price may well have been lower had not a Sleafordian made the 1817 purchase for what may have been reasons of municipal pride, for the purchaser was John Pearson, Benjamin Handley's partner in the solicitors firm of "Handley and Pearson".

Toll leasings.

To a certain extent the economic climate which surrounded the Navigation can be gauged. While the shares were selling on the open market at less than face value, outsiders were willing to risk putting their money into the Navigation in other ways. This can be seen with regard to the leasing of the dues.

Details of the leasing of the wharf, warehouse, and yard from 1811 until 1825 are completely unknown but some information is forthcoming from the leasings of the tolls.

At the Annual General Meeting of 1809 the proprietors passed the following resolution,

"The proprietors ... are of opinion that the letting of the tolls or rates of tonnage would be of advantage to the company and request the Committee will take into

consideration the letting of the said tolls by auction for such number of years as they may think proper and it is requested that the said Committee do hold a Meeting as soon as Convenient to take this Measure into Consideration."

This wording suggests that there was no lessee of the tolls at that time.¹ Whether someone was forthcoming is not known. There is usually a note in the Annual General Meeting minutes, when the tolls are known to have been let, to the effect that the Clerk should advertise such letting in the "Lincoln., Rutland and Stamford Mercury" and, based on this and having regard to the economic situation generally, it is doubtful if they were taken up.

The minutes and the local newspaper correspond in the following manner:

<u>Minute announcing letting of the tolls.</u>	<u>Advertisement appears in the "Lincs. Rutland & Stamford Merc."</u>
<u>May 8th.1816</u> - to be let for 3 yrs	<u>June 14th.1816.</u> - to be let from July 1st for 1 to 3 years.
<u>May 1st.1821</u> - to be let for 3 yrs	<u>May 25th.1821.</u> - to be let from July 1st for 3 years.
No record.	<u>June 28th.1822.</u> - to be let from August 1st. for 3 years.

Thus, a lessee for the tolls could well have been found in 1816 but one definitely did not appear in 1821 and the tolls were readvertised the following year. The May 21st.1821 advertisement included the statement that the Sleaford tolls had made, on average, £900 per annum over the previous three years. This is interesting as it was

¹ The Annual General Meeting of the previous year (1808) noted that a debt from the Navigation to Benjamin Cheales could be paid after the receipt of the next month's tolls, so indicating that there was no lessee then.

obviously designed to attract a lessee. It seems as if the 1816 lessee, if there was one, stayed for two years, after which time the tolls were again taken by the company.

Trade.

The growth of water-borne trade in this part of Lincolnshire can also be considered in assessing the improving circumstances of the Navigation. There are two important sources which can provide this information.

The first are the records of the port of Boston for tonnage and lastage.¹ These records show the amount of grains by weight and toll duty, which was handled by the port. The grain came from three sources into the port, from Spalding; from Wainfleet; and down the Witham.

Almost all the entries in these records are for grains leaving Boston by sea² and, as far as the Witham-originated grains are concerned, were most probably the produce of the lands bordering the Witham on both sides above the town. Included in these figures must be those cereals harvested along the course of the Slea and Kyme Eau and carried by the Sleaford Navigation into the Witham en route for Boston.

While these records begin in full in 1815 there are odd entries back to 1812. For the period under discussion they terminate with the quarterly entry for January, 1821, although they recommence in full again in 1826.

1 Boston Corporation Records. 7/B/1/4. Boston Municipal Offices, West Street, Boston. Lastage was a duty payable for the right to convey goods in ships.

2 There is the occasional reference to a small shipment of grain into the port, usually from the Continent, and this is an example of Boston being used as an entrepôt, for this grain would be sent out again, most likely to London.

Tonnages of grain passing through the port of Boston from the
River Witham area (Spalding and Wainfleet returns omitted)

<u>Year ending:</u>	<u>Wheat</u>	<u>Other grains.</u>
April 30th.1816	47,745	241,822
" " 1817	60,617	254,451
" " 1818	58,288	292,909
" " 1819	22,645	161,899
" " 1820	42,263	210,520
To January 1821	29,723	143,896

From the trend shown by these figures there would seem to be a recovery under way from a low in 1815 and the early part of 1816 for about two years. This would correspond with the general post-war depression in trade. The 1819 decline is also markedly shown but these overall yearly amounts fail to illustrate the dramatic decrease that actually took place in the volume of grains passing through the port from this source area. This is very noticeable, however, if the quarterly returns for the period immediately preceding and following 1819 are examined:

<u>Quarter ending:</u>	<u>Wheat</u>	<u>Other grains</u>
Jan.5th.1818	12,523 tons.	83,362 tons.
Apr.5th.1818	10,802	87,313
Jul.5th.1818	4,560	40,451
Oct.10th.1818	5,383	42,228
Jan.5th.1819	4,698	42,204
Apr.5th.1819	8,004	37,016
Jul.5th.1819	4,820	47,089
Oct.10th.1819	13,390	59,489
Jan.5th.1820	11,539	43,598
Apr.5th.1820	12,514	60,344

From these more detailed figures a modification to the assertion made above can be added. The decline began during the first half of 1818 and continued through until almost the end of 1819. By the middle of 1820 the tonnages were back to normal.

Therefore, the trend of grain movements through Boston from the area to the north can be reasonably clearly seen. However, the question arises as to how far these trends can be applied directly to the trade on the Sleaford Navigation.

Fortunately, a body of records has survived which can provide an answer of sorts. Ideally the toll receipts would be analysed but as these have never been found a source one step removed from them has to be utilised. This source is the half-yearly summary of the tolls collected on the Witham Navigation¹, a summary which runs complete from March, 1813. until the Great Northern Railway Co. leased the Navigation in June, 1846.

According to the Sleaford Navigation Act, and then modified by the Witham Acts of 1808 and 1812, vessels navigating on the Sleaford Kyme Eau and passing to and from the Witham paid a reduced rate of toll to the Witham Navigation. Clause 27 of the Witham Act, 1812 stated,

"Goods, Wares and Merchandize, liable to pay Toll on the Horncastle and Sleaford Canals are subject to a Toll of Nine pence per ton if carried upon any part of the Witham Navigation; and an additional Toll of One-half the Amount of Toll payable for navigating the River."

The tolls for navigating the Witham for ordinary shipping were:

- i) From within one mile of Stamp End Lock, Lincoln, to within one mile of the Grand Sluice, Boston: 3/- a ton.
- ii) For any distance on the Witham, up to 12 miles: 1/6d. a ton.
- iii) For every additional mile: 1½d. a ton.

¹ ES 4/4/3-5. Lincoln Archives.

Thus, the tolls for Sleaford-bound or -originated vessels payable on the Witham would be:

To and from Lincoln = 21 miles from Stamp End to Chapel Hill

- i) Basic charge..... 9d.
 - ii) 12-mile charge.....1/6d.
 - iii) 9 extra miles @ 1/2d.....1/1 1/2d.
- ii) and iii) are charged at half rate = $2/7 \frac{1}{2}d + 2 = 1/3 \frac{3}{4}d$.
 $1/3 \frac{3}{4}d$. + basic charge of 9d. = Total toll of $2/0 \frac{3}{4}d$. a ton.

To and from Boston = 10 miles from Grand Sluice to Chapel Hill

- i) Basic charge..... 9d.
 - ii) 12-mile charge.....1/6d.
- ii) is charged at half rate = $1/6d. + 2 = 9d$.
 9d. + basic charge of 9d. = Total toll of 1/6d. a ton.

In order to keep their records straight the Witham Navigation noted the Horncastle and Sleaford receipts separately from the rest of their traffic and both separate from one another. Therefore, the cash figure for every half-year denoted what had been collected.

The Witham Navigation collected its tolls at both Lincoln and Boston and also, or so it would seem, at a point somewhere along the Sleaford Navigation, probably for vessels which were not beginning or ending their journeys in Sleaford itself but at some intermediate point along the Navigation, such as South Kyme or one of the mills. These records are limited, therefore, in that they do not give a record of the full trade of the Sleaford but only that which passed onto the Witham, not that which moved internally between points along the 13-mile waterway.

As these summaries are of amounts of toll taken only and do not itemise the goods carried a breakdown of cargo types/amounts is impossible but, even with this limitation, they are a very valuable source of trading information. This is particularly so as a separate cash amount is given for the trade to and from Boston and Lincoln,

to and from Sleaford. So, four amounts are recorded in each half-year summary and show in which direction the relative volumes of goods were being transported. Knowing the rate at which tollage was charged on the Witham these cash figures are readily convertible into weights.¹ A direct conversion of these amounts to relate to the Sleaford trade is not possible due to the alteration in the toll rate for coal made in 1807.² A further difficulty in obtaining accurate figures for the Sleaford trade is the fact that the amounts noted as being collected along the Sleaford do not state from which direction (Boston or Lincoln) they came and so a definite toll amount cannot be attached to them.

Even so, the following tonnages can be deduced as having been carried:

Tonnages passing between Sleaford and Witham Navigations.
1814 - 1821.

<u>Year ending:</u>	<u>Tonnage (to nearest hundred)</u>
March 25th. 1814.	4,300
" " 1815.	4,800
" " 1816.	2,900
" " 1817.	6,000
" " 1818.	7,300
" " 1819.	6,000
" " 1820.	6,600
" " 1821.	7,500

It can be seen that the post-war decline noted in the port of Boston records is revealed here also. So is the fall in 1819 although, as with the port figures, the drop here began in 1818 and recovery beginning during the latter half of 1819.

1 See Appendices H and I.

2 See p.171.

The above tonnage table had been continued until 1821 as it is possible to use the figures to tell something about the proportion of internal trade along the Sleaford Navigation compared with that going into the Witham.

The advertisement in the "Lincoln., Rutland and Stamford Mercury" of May.25th.1821 has already been noted as saying that an average toll of £900 a year was obtained on the Sleaford during the previous three years. Working from this £900 figure the following comparison of these two types of trade can be made. However, an assumption which needs to be made also is that as the importance of imported coal was so great, the tonnages of those goods coming into Sleaford all represent coal. This was certainly not the case but even if it represented three-quarters of the cargoes the resultant conclusions would not be substantially different. The rate for coal was altered in 1807 so that 23 cwts. was to be charged as for 21½ cwts. and so the tonnages recorded by the Witham Navigation need to be altered from those given in Table 1 below to those given in Table 2.

Table 1: Original figures, based on a direct conversion of the Witham Navigation summaries into weights, 1818-1821.

<u>Half-year to:</u>	<u>Collected at</u>	<u>From Sleaford</u>	<u>To Sleaford</u>	<u>Extra.</u> ¹
Sept.29th.1818	Lincoln	369.44 tons	2,118.59	
	Boston	309.34	317.72	
Mar. 25th.1819	Lincoln	149.34	1,894.02	89.7
	Boston	455.47	243.22	
Sept.29th.1819	Lincoln	245.35	1,920.22	372.15
	Boston	373.08	457.58	
Mar. 25th.1820	Lincoln	496.56	2,111.56	
	Boston	398.05	215.95	
Sept.29th.1820	Lincoln	329.83	2,583.44	438.37
	Boston	559.65	396.41	
Mar. 25th.1821	Lincoln	376.68	1,949.42	
	Boston	482.84	350.56	

¹ Taken by Witham Nav. along the Sleaford Navigation.

Table 2: Adjusted figures, allowing for the reduced coal toll on
the Sleaford Navigation, 1818-1821.

<u>Half-year to:</u>	<u>Collected at</u>	<u>To Sleaford</u>
Sept. 29th. 1818	Lincoln	1,980.40 tons.
	Boston	297.00
Mar. 25th. 1819	Lincoln	1,770.49
	Boston	227.35
Sept. 29th. 1819	Lincoln	1,794.98
	Boston	427.73
Mar. 25th. 1820	Lincoln	1,973.85
	Boston	201.86
Sept. 29th. 1820	Lincoln	2,414.95
	Boston	370.55
Mar. 25th. 1821	Lincoln	1,822.28
	Boston	327.69

The figures from Sleaford, as they would not have represented coal shipments, remain as in the previous table.

As the Witham Navigation summaries state that the cash amounts were taken on cargoes going all the way to Sleaford, and the full toll of the Sleaford Navigation for goods travelling the whole length of the waterway was 2/- a ton, the above amounts of weights can be converted into revenues which the Sleaford received in tolls. For the "Extra" cargoes an average figure has been taken - as going for 1/10d. a ton on the Witham and 1/6d. a ton on the Sleaford (where the minimum toll was 1/- and the maximum, 2/- a ton). The toll receipts on these cargoes were:

<u>Year ending:</u>	<u>Toll receipt (to nearest £)</u>
Mar. 25th. 1819 :	£561
Mar. 25th. 1820 :	£614
Mar. 25th. 1821 :	£696

An average of about £623 is obtained over the three years. £277 more is needed to bring this total up to the £900 stated in the newspaper and this must have been produced from internal traffic. The conclusion which can be drawn is that almost three-quarters

of the Sleaford's traffic at that time was long-distance (actually 69.66%), with the remaining one-quarter being internal.

Composition of the Sleaford Committee of Proprietors.

During this period of the Navigation's development, changes were taking place in the composition of the Committee of Proprietors. As would be expected, the number of people who were involved with the early operation of the company were becoming fewer.

Anthony Peacock had died in 1809 but other very active supporters of the company had gone before, such as the Rev. Edward Waterson, who had been last appointed to the Committee in 1800. By 1808 only three of the original Committee were still active on it and, by 1812, only one, William Kirton.

Outside the Committee, though, the Clerk and Treasurer, Cheales and Handley respectively, remained. Anthony Peacock's second son, John Andrew, had been appointed to the Committee in 1810 and was probably a replacement for his father. He served until 1821 when his elder brother, Anthony Taylor Peacock, seems to have taken his place.

On the Committee in 1808 were some men who, although not on the original Committee, were nevertheless active in the promotion of the Navigation before 1792. John Brittain was one of these, the partner of William Kirton in his freight-carrying business and also John Woodford, a partner in "Kirton, Woodford and Co." The inn-keeper, Edward Bates, was a member, having been elected to serve in 1804, the same year as William Almond, the miller at Cogglesford. Bates went in 1813 and Almond was last elected in 1815. He retired from his mill in February, 1816 and died on April 11th. 1816, aged 78. John Brittain continued until 1818-19 when he too, presumably, died.

So, by 1820, only Handley, Cheales and Kirton were left of the original Navigation promoters.

The period from 1808 until 1825 has been dealt with separately

mainly because details of the operation of the company between those two dates are limited. However, the end of the period also marks the end of the connections with the 18th. century promoters. At the Annual General Meeting of 1824 Benjamin Handley resigned from the Treasurership, a post he had held for almost 32 years. Taking into account his first appearance as a promoter of the Navigation in 1782, his connection with the waterway had extended over a period of 43 years. He must have been about 70 when he resigned (having been born in 1755) and he had only another 4 years to live. He died on April 23rd.1828.

Handley's resignation may have been prompted by the death of Benjamin Cheales in 1824. His connection with the Navigation was not as long as Handley's, appearing as he did in company affairs in 1791. As Cheales was born in 1758, he was about 66 when he died. The third member of this triumvirate, William Kirton, died in 1827, aged 80.

Two important positions therefore became vacant in 1824 - the Clerkship and the Treasurership. Cheales' job as Clerk was taken by his partner in his solicitor's firm, William Forbes¹ while the Treasurership went to John Pearson, the same person who had bought the only shares so far to have come onto the open market.²

The surveyor.

On the operations side, the most important post to become vacant during the period was that of the surveyor. Thomas Rylatt finished in that position in 1816 (he may have died) and the job was advertised in the "Lincoln., Rutland and Stamford Mercury" on May.24th.1816,

1 This partnership had begun in 1808. FSJ 12F/7/1. Lincoln Archives.

2 See p.182.

[Wanted at Midsummer], "... a steady person to superintend the works, to cleanse the same twice in the year of weeds, attend to the repair of locks, banks, towing-paths, gates, bridges and other works."

A house was provided for the successful candidate, who was Richard Winter. He was probably a relative of the George Winter who had looked after Anwick Lock for twenty weeks in 1794, prior to the appointment of Anthony Thacker.

PART SEVEN

THE YEARS OF PROSPERITY, 1825-1857.

Introduction

This part of the history of the Sleaford Navigation is divided into two sections, both covering the period from 1825 until 1857. The first section deals with the internal operations of the company and is further sub-divided into the two periods, 1825-36 and 1837-57, while the second section relates to the various aspects of the introduction of the railway into the district, from the time the idea was first put forward until the completion of the "Boston, Sleaford and Midland Counties Railway" from Grantham to Sleaford. By this route, and by its completion to Boston two years later, the railway placed itself in direct competition with the Navigation and, thereafter, the history of the Navigation was radically different from that which had gone before. Ideally the two sections should be integrated into one unit but in view of the disjointed effect this would produce in the narrative the present procedure has been adopted.

The Navigation, 1825-1836.

Sleaford and the Navigation in 1825.

By 1825, Sleaford was developing into a thriving market town. The population had risen to just over 2,300 from a figure of 1,609 at the beginning of the century and the Navigation was seen as a major influence in the commercial success of the community. "White's Lincolnshire Directory" for 1826 says that,

"The Sleaford Canal has tended much towards the improvement of this flourishing market town."

It can be postulated that the increased trade made possible by the Navigation was a factor in the much-above average national growth in the town's population during the first decade of the century.

Detailed records of the Navigation's activities begin once again in this year and it is worthwhile looking at the town, as described

by this directory¹ to see if it is possible to discover what effect the Navigation was having upon it and also to see the backgrounds of those people who were to influence the running of the concern in the future.

a) The Committee.

Benjamin Handley was still living and continuing with his banking activities, even though he had resigned from the Navigation Treasurership the previous year. His replacement, John Pearson, was in partnership with brother, Charles, in an attorney firm located in Westgate, near to the centre of town. Benjamin Cheales' successor as Clerk, William Forbes, was similarly employed, in a partnership with Cheales' former partner, William Foster. There were four attorney firms in Sleaford in 1825 and so, two were represented with officers in the Navigation. A third firm, in the person of Richard Roberts, its founder, was represented on the Committee of Proprietors, while the fourth had its founder, Charles Hare, elected to the Committee in 1828.

The other members of the 1825 Committee were, Anthony Taylor Peacock,² the banker, and William Kirton, his partner, James Brown (who was either an excise officer or a brickmaker and lime burner), John Sturton (a farmer and brickmaker) and John Tindale (a draper).

1 pp.169 - 174.

2 His youngest daughter, Louisa, married the Rev.F.W.Rhodes of Bishops Stortford. Their fourth son was Cecil Rhodes. This Anthony Taylor Peacock was, therefore, Cecil's grandfather and Anthony Peacock, the co-founder of the Sleaford Bank, was his maternal great grandfather.

b) Wharfingers, carriers and coal merchants.

Those residents of the town who had a great interest in the Navigation, while not being actually employed by it, included the wharfingers. The lessee of the Navigation wharf in 1825 was one, Christopher Stacey, who was noted as having the occupation of an auctioneer.

Beside the Navigation basin there was a cut which led northwards towards Eastgate. Near this stands the "Cross Keys Inn", now derelict, the proprietor of which in 1825 was Francis Reast. He was also a coal and corn merchant as well as being a wharfinger, all of which activities would have taken place along this cut. Trouble had arisen in the past between the Reast family and the Navigation over the ownership of the cut and would do so again in the future, but in 1825 Francis Reast was utilising it as a facility for his trade in coal and corn and it is known that a packet service operated from here every Tuesday morning to Boston for both goods and passengers. A few years later¹ the steam packets "Three Brothers" and "Off-She-Goes"² were leaving Reast's wharf every Tuesday at 10 a.m.

The "Cross Keys Inn" was also a centre in the town for the land-carrying trade in goods. A John Cole went to Bourne every Monday and to Stamford every Friday, and a Richard Porter to Fulbeck on Mondays and Newark every Tuesday and Friday.³

1 Pigot's "Directory" of Lincolnshire, p.552. Thought to be of about 1830. Boston Reference Library.

2 This vessel came up for sale in April, 1825, when she was described as being about 26 tons and navigating between Sleaford and Boston.

3 Pigot's "Directory".

A second wharfinger of 1825 was John Smith, of Eastgate, Sleaford. His wharf was also on the cut. He was running a "regular trader" weekly to Lincoln and another once-a week run to Nottingham and Derby, collecting and sitting-down at all places along the route.

At this time there are no regular runs noted as beginning or terminating at Navigation Wharf but this is unlikely to mean that none existed. By 1830, for example, John Johnson's, "Boats" was leaving Navigation Wharf every Tuesday for Lincoln.

An idea of the change which had been brought about by the Navigation in the trade in coal can be obtained from the fact that there was sufficient coming into the town to provide livelihoods in six commercial concerns. Francis Reast has already been mentioned, as has John Smith, who was also a corn and coal merchant. A William Harris of Market Place, William Hyde of Southgate and William Rodgers, also of Southgate, dealt exclusively in coal, while John Howbray, who later became miller at the Paper Mill, traded in corn as well.

Company finances.

By the fine summer of 1825 the finances of the company were in a reasonable state. Trade had developed sufficiently well for leases to have been found for both the warehouse and wharf and for the tolls - Christopher Stacey and John Keyworth respectively. There were no outstanding debts of any significance to either institutions or individuals and the Annual General Meeting of 1825 was able to declare a 5% dividend on the balance-in-hand of about £300. While this was not a vast amount, still the Navigation was continuing to maintain a surplus at the end of each year.

By the time John Keyworth's lease on the tolls became due for renewal in September, 1828, the balance produced by the Navigation at the previous Annual General Meeting had nearly doubled to about £600. Keyworth agreed to take the tolls again for one year, at

£1,010. Is it possible to estimate how profitable this one year's tenancy was for him by using the technique explained on pages 189 and 190?

Taking the Witham Navigation figures for this year -

<u>Half-year ending:</u>	<u>From</u>	<u>To Sleaford</u>	<u>From Sleaford</u>	<u>Extra</u>
Mar. 25th. 1829	Lincoln	2,622 tons	625 tons	11 tons
	Boston	222	407	
Sept. 29th. 1829	Lincoln	2,793	462	45
	Boston	447	140	

Allowing for the coal-rate and assuming all trade coming to Sleaford is coal, these figures produce a total revenue of £736. If this represents only 69% of the trade, as assumed in the example on p.190, a final total of about £1,066 is obtained.

On these figures which would be, if anything, on the low side, John Keyworth certainly did not make a loss in taking the tolls for the price he did.

Throughout the rest of the period until 1836 the trade in the Navigation continued to expand and, even allowing for closures for repairs and the interruptions occasioned by two major repair-construction works in the early 1830's, this increase was maintained. There was no decrease in handled tonnages even in 1834 which was a year of exceptionally low rainfall over the eastern counties of Britain,¹ and when it might have been expected that traffic would be held up for some time. The period of drought lasted from June until it broke on October 7th. and the rains came in time for the corn harvest to be moved out of the district. As this was one of the best harvests known up to that time, any losses incurred to traffic flow during the drought would have been

¹ The rainfall total for Boston in 1834 was 14.66 inches c.f. an average of about 10 inches more a year. Statistics contained in the Wheeler Collection of original meteorological records, Boston Reference Library.

made up by them.¹

Letting of the tolls, warehouse, etc.

With an increased trade the Navigation continued to experience no difficulties in letting the wharf, warehouse and the tolls, and the amounts paid for them reflected the increased returns expected.

The toll lettings were the first to reflect this growth and they went for £1,310 in September, 1830 to Enoch Blackburn of Hunslet, Yorkshire. He achieved the slight reduction of £20 per annum when he obtained the lease again three years later, despite an increase in the tonnage passing along the Navigation in the meantime.

In 1830, Enoch Blackburn was a partner in the firm of "Blackburn and Bower" of Hunslet,² glass manufacturers and, in 1833, John and Joshua Bower stood surety for the letting fee.³

The rise in the amount received by the company for letting the warehouse and wharf came rather slower than for the tolls. From the time of the first letting in 1805 they had always gone for sums in the region of £50-£60 a year. Christopher Stacey's lease had been taken by John Smith, mentioned earlier, first for one year (in 1828) and then for a further seven years in 1829. So, it was not until 1836 that there was an opportunity for the increased trade to be realised in this pricing when it jumped by 100% from £50 to £100 per annum.

1 "Summers and Harvests of the XIX Century", a summary of statistics taken from the, "Farmer's and Country Gentleman's Almanack" in the form of a newspaper cutting. Boston Reference Library.

2 "Lincoln., Rutland and Stamford Mercury" for June 14th. 1833.

3 A George Fenwick was probably employed by them as collector at the Bottom Lock.

Share prices and dividends.

The sale of company shares on the open market does not help in supporting this prospering position as, officially, none changed hands for cash. It is, therefore, surprising to find the "Derby Mercury" for February 5th.1834 reporting,

"... One Sleaford Canal share sold for £68 and one for £70."

There is no record of any shares having been sold for cash at this time as evidenced by company records but shares 129 and 130 came into a new ownership about then,¹ and this notice may relate to them.² A further complication arises when the newspaper continues with the statement that the last dividend paid by the company was $£6\frac{1}{4}\%$. In fact, for 1833 it was 5%. The figure of $£6\frac{1}{4}$ would probably relate, though, to the return on the more common £125 share but the percentage symbol after the amount would infer that this was the return on £100.

The mention of dividends raises a further possible confirmation of prosperity and do, in the main, support it. From the dividend of 1815 until that of 1831 (excepting 1827) this was a 3% company. The dividend of 1832 was for 4% due to the enlarged balance held by the Treasurer and it was followed by one for 5% in 1833.

1 Sale document dated April 6th.1832 and entered into the Share Transfer Book on August 8th.1833.

2 For a complete record of share ownerships during the whole period of the Navigation's operation, see this author's manuscript "Sleaford Navigation Share Ownership, 1792-1878", English Local History Dept. Library, University of Leicester.

Nothing was paid in 1834 and only 1% in 1835 . However, this was not unexpected bearing in mind the large expenses brought about by repair works on Lower Kyme Eau, described later, and the borrowing from the Treasurer which had taken place and which had to be repaid. The state of the trading situation was such, though, that the following year saw a return to 5%.

Company officials and employees.

In dealing with the company officials the period up to 1859 has been considered in this section rather than just until 1836. This has been done in order to preserve continuity as those in office maintained their position into the following period - this division has been made on economic and trading grounds and had no effect on the posts of officers of the company.

The Chairman, Anthony Taylor Peacock, died in 1829 and was succeeded by his younger brother, John Andrew, who had previously held this position throughout the second decade of the century. He remained until his death in 1834 at which time another Anthony Peacock took over. This Anthony was the eldest son of Anthony Taylor. His appointment dated from the Annual General Meeting of 1835 and he was still in office in 1859. Some confusion regarding names occurs after 1851 for the Chairmanship seems to pass to an "Anthony Willson". The reason for this is quite simple. Anthony Peacock had been left a legacy by an uncle which he inherited on the condition that he assumed that uncle's surname. This he did and, thus, Anthony Willson and Anthony Peacock are one and the same person.

In 1825, John Pearson, the attorney, held the post of Treasurer. He resigned as from May 5th 1829. and his brother and partner, Charles, was appointed. He remained for 17 years, being replaced by another attorney, William Hungerford Holdich, in 1846. Once again, Charles and William were partners.

The Clerk's post did not become vacant until 1842 and here, as

with most other canal companies, solicitors always filled the post. William Forbes had replaced Benjamin Cheales on his resignation and, on Forbes' death in 1842, his partner, William Foster, attained to the office. He stayed until almost the very end of the period, dying in 1858 when another man of the law, Henry Peake, took his place.

It can be seen from this that the appointment of the company officials was restricted to a very small and select group. The Chairmanship had become what seems to have been an hereditary appointment of the Peacock family, while the other two major company posts seem to have been open only to the local members of the legal profession, they being the most qualified men to perform the necessary functions of the offices as part of their everyday work.

In considering those people employed by the company in various other capacities the picture is rather more complicated and so only those concerned in the period up to 1856 will be dealt with now.

The post of surveyor changed hands a number of times. The incumbent of 1825, Richard Winter, is last heard of in his official capacity in 1828. The Committee minutes of June 11th.1829 speak of him as "deceased" and mention the appointment of George Winter, a possible relative, as his replacement. Could this be the same man who looked after Anwick Lock for a short time in 1794?¹ It would not have been impossible but it cannot be proven. However, he did not stay long. He either resigned or was dismissed as, on June 23rd.1832, William Stennett of Ewerby was appointed at £30 a year. That George Winter did not die can possibly be interpreted

1 See p.144.

2 Also appointed surveyor to the Sleaford to Tattershall Thorpe Turnpike, on April 27th.1835. Turnpike minutes, Lincoln Archives.

from a number of later references to a person of this name who was causing damage and obstruction on the Navigation during the latter years of the 1830's. He may also have gone into the carrying trade as a man of that name was fined £5 by the Navigation in 1847 for evading the payment of tolls.¹

There was only one change made in the lock keepers during this period. Anthony Thacker died and his replacement at Anwick Lock was a Samuel Thompson, who took up his appointment on March 23rd. 1829. His conscientiousness in the work did not last long at first for in 1831 the Committee threatened him with dismissal,

"... unless he attends to the waterline and in every other respect does his duty."²

This warning proved sufficient and he remained keeper until 1852.

Works on the Navigation, 1827-33.

Turning now from the officials to the business of the company along the waterway, the supply of water into and along the Navigation was a continual cause for concern but it came to the forefront of the Committee's consideration in 1827. On June 4th. that year the surveyor, Richard Winter, reported to the Committee with a list of soundings taken at the various mills which showed the depth of water to vary between 4'8" at the Bottom Lock and 5'3" at the Dyers Mill. These variations made bank repairs necessary and this work seems to have been sufficient to regulate the depths for the moment.

The subject again came up for discussion a year later and this time the millers were blamed for allowing the levels in the Mill Stream to remain above the statutory level. In order to overcome

1 Paid in April, 1848. Sleaford Navigation Account Book.

2 Sleaford Navigation Committee minutes, November 21st. 1831.

this an instruction was made for black and white-painted posts to be mounted at each lock so that the water marks could be clearly seen and the millers would have no excuse should a similar occurrence happen again.¹ After further discussion it was also decided to call in an outside engineer to take the Navigation's levels and to examine the depths of the locks with a view to regulating the height of the water at each mill. The man selected for this was a Mr. Bower. Unfortunately, his Christian name is not recorded but it may have been "Anthony", in which case he could have been the same man who had made a Witham survey in the early part of the century and who had prepared plans for the works on the Witham which Rennie had reported upon. In the event it was not he who was engaged but an Edward Wright of Muston Gorse near Belvoir Castle.²

His formal contract was signed on June 28th. 1830. The reason for a delay between his recommendation on the 8th. and his final acceptance on the 28th. was that his competence had to be checked by the Navigation. This would suggest that Bower was intended to take the levels, etc. and it was noted that his costs and expenses were to be referred to the proprietors when they were known. Perhaps an estimate of these costs was submitted but was rejected by the proprietors at their Annual General Meeting of May, 1830. and Edward Wright's name was suggested by someone as an alternative.

Wright's engagement was,

"... for taking and properly laying down the levels on the Navigation from Sleaford to the Witham, for the sum of £10, which is to include the whole of Mr. Wright's charges for section, reports, etc."³

1 Sleaford Navigation Committee minutes, June 3rd. 1828.

2 Ibid. June 8th. 1830.

3 Ibid. June 28th. 1830. No section or report has so far been found

The company undertook to find three men to assist him in this work. He delivered his report to the Committee on September 27th. when it was approved and the £10 contract fee was ordered to be paid.

What the subsequent events were relating to these levels is not recorded but Wright's name appeared again two years later when he was paid a further £21 for surveying the Navigation and reporting on its state.¹ This was a possible follow-up operation to the levelling taken earlier and was the likely reason for the major works which were soon to follow.

Wright's report probably said that the water depths could only be maintained if, first, a new staunch was erected at the Bottom Lock to control the flow of Navigation water into the Witham and, second, a complete cleaning out of the watercourse was undertaken.

This work was begun by the issuing of contracts for part of the cleaning on July 1st. 1833.²

The cleaning from the Bottom Lock as far upstream as South Kyme was undertaken by Richard Greenfield (at a final cost of £306), while a William Newton gained the contract from Anwick Lock to Wash Dyke, near Haverholme (final cost, £292) and from Haverholme Lock to the Corn Mill (final cost, £178). A Philip Laughton performed the same operation from the Corn Mill to the Dyers Mill for a final cost to the company of £86.

The replacement of the staunch at the Bottom Lock was needed not only because it was probably not controlling the water flow properly but also because for some time the river had been under-

¹ Sleaford Navigation Annual General Meeting minutes, May 1st. 1833.

² At the "Ship Inn", South Kyme.

mining the foundations, a problem which was aggravated by these foundations having originally been laid on what was described as "quicksands"¹. As a different site could not now be chosen for the staunch it had to be reconstructed on the same foundations.

Feeling themselves not wholly confident in their ability to do this, the Committee called on the Witham Drainage Commissioner's surveyor, Mr. Lewin, to give his opinion as to the best mode of construction. This communication was made through the Committee's representative, William Pickett, a carpenter by trade but also someone who could give,

"... all the practical information you may require and the person selected by the Committee to carry the work into execution."²

Work on the repairs and cleaning proceeded very quickly and there does not seem to have been any necessity to close the Navigation while they were being done.

At the Annual General Meeting of May, 1833, a balance-in-hand of £1,302 was realised. A 5% dividend was declared which, amounting to £675, left about £625 in the Treasurer's hands. These works had exhausted this sum by mid-August, 1833 and from then then Treasurer paid the bills as they came in from his own pocket. The Committee had formally applied to Charles Pearson to advance these extra sums and he had agreed to do so, being allowed a 5% interest on all loans.

The time taken to complete the works is uncertain but the final statement of account was presented at the Annual General Meeting of 1834. The total cost was £2,426.

¹ Sleaford Navigation Committee minutes, July 6th, 1833. Mentioned in the copy of the letter to the Witham Drainage surveyor.

² Ibid.

From the records of this Annual General Meeting it can be learned that the bills paid by the Treasurer up to that date amounted to £1,624 - in other words, Pearson had loaned the company about £1,000 during that one year. Something over £700 was still due to the various tradesmen and craftsmen and the Treasurer was again requested to supply this money, which he did for 12 months at 5% interest.¹

The works of 1836.

It took just two years to build up the finances sufficiently to embark on the second of the construction-cum repair projects of the 1830's.

The 1834 works on the lower Kyme had left the first debit balance for over two decades but this deficit had been converted into a £1,000 plus profit by 1836.

Coming into the history of the Navigation now was the Grantham merchant, Richard Bradley. He seems to have been engaged in a number of commercial enterprises in that town, including building, and he was a shareholder in the Grantham Canal. His interest in the Sleaford began in October, 1829, when he acquired two shares. During his association with the Navigation his shareholding grew until, on his death in 1855, it stood at 11 shares, making him the largest individual holding at that time.

Richard Bradley was to play a major part in these second works. In many instances he was found performing the tasks which one would have expected to find the surveyor doing, e.g. ordering materials, viewing works to be begun and those finished. However, this was not unusual. On many canals and Navigations Committee members,

¹ What part the "Peacock, Handley and Kirton and Co." bank played in this financing cannot be ascertained as the bank records for this period do not exist.

usually landed gentlemen who had a practical knowledge of, for example, drainage, because they were large-scale farmers in the Egremont/Coke tradition, often superintended the surveyors, who were essentially craftsmen. Thus, the company's money was safeguarded by the voluntary actions of these unofficial "Chairmen of a works committee."

Bradley's name first appeared in a document relating to the 1833 works. He had written a letter to the Committee with his observations on a bill for some timber which had been supplied for the new staunch.¹ A year later, while the surveyor was investigating the top gates at Kowbray's Paper Mill and trying to prevent an escape of water, Bradley was supplying sketches for the strengthening of the lower doors at Haverholme Lock.² One year later again, on a Navigation View on June 14th.1836, it was Bradley who was then investigating the top gates at the Paper Mill Lock and who,

"... with two of the Committee, do cause such repairs to be done as they may think proper or put in the new gates if necessary."

The above minute should be borne in mind as it will prove of significance in the light of later developments and statements.

For the works necessary at this lock, Bradley was asked by the Committee to order a small cargo of limestone from a Mr. Spencer of Kinoulton. Here again he was performing a duty which one would have expected to have been the surveyor's responsibility although his close connection with the Grantham Canal, alongside which Kinoulton is located, was probably the reason for his having been chosen. The order was delivered to Spencer on June 18th. and he

1 Sleaford Navigation Committee minutes, May 26th.1834. This staunch was supplied by Messrs. Howden and Son of Boston and is still in position at the time of writing.

2 Sleaford Navigation Committee minutes, View, June 23rd.1835.

quickly wrote back¹ requesting a "passport" allowing him passage free from tolls on the Navigation as far as the lock.

Bradley had also been in contact with Joseph Frith, an obvious acquaintance of his, a canal carpenter from Redmile, a hamlet lying next to the Grantham Canal in Nottinghamshire. Frith gave information concerning what would be needed in the way of labour and materials if the Paper Mill lock sill was found to be in need of replacement. His experience to give this advice was based, according to Bradley, on his having made or repaired ten or twelve locks on the Grantham Canal since its opening. While not committing himself to a figure for the materials, Frith estimated the labour cost for replacing the sill and fixing new gates at about £20.

Much of the material for putting in the sill, together with the new sill itself, had already been acquired and was lying on the Sleaford wharf awaiting the commencement of the works when Bradley wrote to the Committee.² In this he suggests that Frith be engaged to put in the sill and the gates.

A curious change of attitude towards the installations in general now appeared in his writing for, early in the letter he wrote,

"I am quite sure the lock gates would, or might, have been repaired and the sill undisturbed for some time."

and later,

"It certainly is a shameful waste of money to make sills, order stone, etc., for a job that any experienced person will tell you need not have been done these ten years and when we ask who gave the order for the sill, etc. no-one knows."

1 Sleaford Navigation Committee minutes, July 1st.1836. Letter dated, June 21st.1836.

2 Sleaford Navigation Committee minutes, July 1st.1836, Letter dated, June 24th. 1836.

These statements raise a number of questions concerning the competence of the company officials. How was it possible for those who gave the order to replace an existing sill and lock gates with new structures to remain unidentified? What was the role of Stennett, the surveyor, in this? The regulations of the company made it obligatory that when contracts were made, such as for the provision of materials, two members of the Committee had to act together and this brings us back to the minute of June 14th. 1836 (see p.208). The evidence seems to point to this order having been made either by Bradley himself acting against this regulation or the two Committee members who were authorised in that minute to order repairs to be made to the lock. The names of these two are not given but they may well have been John Payne and Rowland Williams who, the previous year, had been given the direction of the repairs to Haverholme lower lock doors in accordance with a sketch provided by Bradley. One tends to feel also that the surveyor may well be implicated in this as he was a) the official who by rights should have recommended the replacement of the sill and b) would have investigated the state of the sill when trying to prevent the escape of water from the lock's upper gates in June, 1835.

Bradley concluded his letter with some assurances,

"I hope the Gentlemen of the Committee will not think me, as a shareholder, interfering with their prerogative power in this or in any other matter relative to the Canal Company's affairs. I have but one motive - the prosperity of the Canal Company in general and no self-interested motive. If, on examination of the sill in question, it is perfectly sound, if all things is ready for its removal, you are not bound then to put in the new one. I promise you an honest report upon it and if Mr. Prith is present at the time, you will have his likewise."

After considering what Bradley had to say the Committee decided to go ahead and put in the bill and engaged Joseph Frith to do it, the whole project being under Bradley's direction.

It did not take long for the work to be done for the Committee was able to see it completed on August 2nd. at which time they gave their approval as to the manner and form of its execution.

The Bacon litigation.

Only once during the entire history of the company is it known that a dispute arose which necessitated redress being sought in the High Court. In this it must be remembered that it cannot be proven that the argument which arose between the Navigation and John Dyson and Co. in 1794-5 was taken as far as litigation.

The dispute under consideration occurred in 1833-4 and involved a bridge. The events surrounding the case first need to be examined for not only do they give the background of the argument but also provide much evidence on some obscure aspects of the early history of the Navigation.

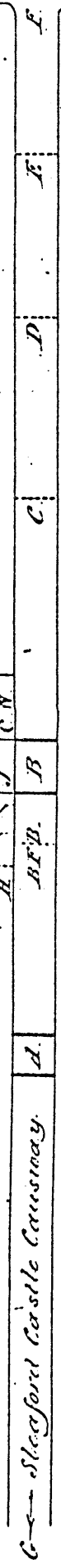
The Navigation had not been completed as far as the limit of Sleaford Castle Causeway, as mentioned in the Sleaford Navigation Act of 1792, as the finances were running low as a result of the incompetence of the building contractors, but instead terminated at the wharf at the eastern side of the town and on the garden site bought from the Carre Hospital. This failure to complete the line was of importance in the later argument.

About 20 yards to the west of the Navigation wharf was a bridge, Bate's Fen Bridge, and the land on both sides of the River Slea, extending from the wharf to the bridge, was part of the estates of the Earl of Bristol. In 1823 this land was sold to a Thomas Fawcett.

In the "Case" which was presented by the company to their solicitor explaining their side of the argument they said that up to 1823 the area of the river between the wharf and the bridge was in

N.

Stearford Town



Stearford

Explorations

- C.W. Commissioners Wharf
- BFB Place where Raccoon Bridge former by stood.
- B The Bridge in question
- A South Bridge in Stearford
- C Heaverholme Mill
- D Kymo Fair Lock
- E Chapel Hill
- F River Witham
- G Stearford Castle Causeway
- G.F. River from Castle Causeway to the River Witham.

H.T. McBeun's Yard or Quay
 C to A 1/2 Miles in length

THE AREA UNDER DISPUTE IN
 THE BACON LITIGATION, 1834.
 (from an original in the
 Public Records Office.)

W. H. Bacon

Fig. 19

the same state as when the Navigation was finished - unnavigable. This is hardly likely to be true as the cut situated above the bridge is shown in use in the print of 1798 (see p.168). However, it is almost certain that this cut fell into disuse sometime soon after that date and vessels were then turned by backing-down the few yards to the junction of the two feeders below the wharf.

In about 1827 or 1828 Thomas Fawcett removed Bate's Fen Bridge and replaced it with another in a position a little lower downstream and immediately above the Navigation wharf and, therefore, on the site of the present-day Carre Street bridge. From this time on Fawcett did not land any goods on his land above the bridge, the reason appearing in the following statement, which would also seem to confirm that the turn-round cut had not been used for many years,

"... Mr. Clarke¹ will observe that the river was not originally made navigable beyond the Navigation Wharf² but the river, having become somewhat deeper than it was when the Navigation was originally cut, boats could be drawn a few yards beyond the wharf and could, if they had been permitted to have done so, have discharged their cargoes upon the land formerly belonging to Lord Bristol and afterwards to Mr. Fawcett, but neither his lordship when he was the owner, nor Mr. Fawcett afterwards, ever availed himself of this opportunity, it being always considered that to have done so would have been a fraud upon the company wharf."

The Committee minute of August 29th. 1833 further reinforces this point,

1 The Navigation's counsel. The "Case" is quoted in Sleaford

Navigation Committee minutes and opinion dated November 1st. 1833.

2 Author's emphasis.

"...the Committee, after ... taking the evidence of several persons as to the extent to which the cutting of the Navigation works were carried and which it was satisfactorily established were carried to the extremity of the wharf yard and no farther ..."¹

On the death of Thomas Fawcett the trustees of his estate (in late 1831 or early 1832) sold the land on the north side of the river and above the bridge to the firm of Bacon and Stevenson,² coal merchants. Thomas Bacon did not adopt the same attitude towards the Navigation as had Thomas Fawcett and saw nothing remiss in allowing vessels to come up to his wharf to unload. This change in circumstance and the resulting loss of revenue probably did not please the Navigation and they may have made an attempt to stop this by lowering the bridge. Bacon claimed³ that up to October, 1833, he had access to his wharf for vessels but, and this appeared in his first letter of complaint to the company, he claimed that the company was building a new bridge at that point and also obstructing the course of the waterway by throwing in gravel and earth. The Navigation's reply was that a new bridge was not being made - the old one was only being enlarged so as to be of the same width as the road at each end of it. They also claimed that they were not acting alone and, in fact, that they had nothing to do with the bridge itself as the improvements were being made from a private subscription of individuals interested in the preservation of the road.

1 Author's emphasis.

2 Stevenson may have been either a sleeping partner or have run a branch of the firm in Lincoln. There exists a letter addressed to him at Lincoln and terms him, "Merchant". Public Record Office, KB1/59/x/E1411.

3 In his affidavit of June 2nd, 1834. Ibid.

Thomas Bacon then brought a legal action against the Navigation company to compel it either to remove the bridge entirely or raise it so that,

"... Boats and barges may navigate the said stream through and above the said bridge to a certain coal yard adjoining the said stream where Bate's Fen Bridge formerly stood and now in my occupation."¹

As the Navigation was originally empowered to erect a bridge on the works to Sleaford Castle Causeway, Bacon claimed that it was not competent for any other person to erect a bridge by which the navigation of vessels may be interrupted, even though that part of the river was not originally, and was still not, navigable. Bacon argued that as the Navigation was authorised by Act of Parliament to be built as far as the Castle Causeway this should now be done, which would give him a direct frontage onto an uninterrupted, navigable waterway.

One of the counter-arguments presented by the Navigation was that they were very considerably in arrears in the payment of interest due to the subscribers and that this should be paid before any further works were undertaken. This is a difficult argument to follow for at first sight there do not appear to have been any arrears of interest outstanding. Each year a dividend was being declared and paid and there were no periods when the company defaulted on the payments. Where then were these "arrears"? The answer seems to lie in Clause 68 of the Sleaford Navigation Act which limited the dividend which could be paid to 8%. Up to 1833 this had never been achieved and the arrears mentioned would seem

¹ Sleaford Navigation Committee minutes, April 8th. 1834. This minute contains a full copy of the text of Bacon's letter.

to represent the difference between what was paid in dividends and the maximum which could have been paid if \mathcal{E} had been declared. In other words, the \mathcal{E} maximum dividend was being adopted by the company in their dispute with Bacon as a payment as of right to the shareholders.¹

A further argument against Bacon's claim was that there were insufficient funds to complete the Navigation to Castle Causeway and so the Court of Equity would prevent any attempt by the company to extend the waterway.²

At the same time as legal action was being undertaken, Bacon continued to receive his incoming coals by off-loading them onto the new bridge from boats lying alongside the Navigation wharf. The lessee of the wharf, John Smith, was powerless to prevent this as no trespass was being committed. To overcome this problem the Committee ordered that a chain and fence be placed across the western end of the basin below the new bridge which would effectively prevent Bacon from using the bridge in this way.³

1 I am grateful to E.C.Hadfield, Esq., for this interpretation.

2 Precedent set in "Mayor and Corporation of King's Lynn vs. Pemberton". 1st.Swanston's Reports, 214.

3 This was not the first time that such an action had been taken.

In 1802 local people were coming downstream from the town and bringing horses into the basin next to the wharf. There they were washing the horses! The Committee saw a likely damage to the woodwork of the basin sides and ordered a chain to be laid across the river and about 1' above it. Whether this was effective in all cases is not known but it probably hindered the use of the turn-round cut and the cut probably fell into disuse soon after this time.

The case was to have been heard in the King's Bench before the February of 1834 but Bacon's solicitor died just about that time and the hearings were delayed. Bacon appointed the firm of Messrs. Watson and Broughton of Falcon Square, London in his place.

The outcome of this case is unclear, at least in the officially documented sense. The available records cease before a verdict is arrived at. The result, however, is known. The bridge stayed and the Navigation was not extended through Sleaford town to the Castle Causeway.

The Navigation. 1837-57.Trade and leasing, 1836-40.

In 1836 the lease on the wharf and warehouse became due for renewal. John Smith had held it for the previous 7 years (since May, 1829) during which time he had paid £50 a year for it. The increasing trade on the Navigation had already resulted in price increases in the lease for the tolls which, over the same 7-year period, had risen by about 30%. The increase in the price paid for the warehouse and wharf lease was more dramatic - the £100 a year contract price of 1836 represented a 100% increase. William Parry of Lincoln took the lease at this price, with Charles Kirk as surety. These two men were to become the partners of the most successful building company in Sleaford during the 19th. century.

When the toll lease also came up for renewal in 1836 it was taken by Joshua Bower,¹ a partner in the previous lease. An increase in the price paid for this lease was also seen, rising £50 to £1,340 a year, and taken for 3 years in the first instance.

The trend in trade, as illustrated by the sums businessmen were prepared to speculate, requires confirmation. The Port of Boston records are silent as there is a break in the returns of tonnage and lastage, beginning in January, 1835 and which, except for the second and third quarters of 1837, do not resume again until

¹ Joshua Bower (1773-1855). A glass manufacturer and colliery owner.

He also leased many of the tollgates on the Yorkshire turnpikes.

H. Albert, "The Turnpike Road System in England, 1663-1840", C.U.P

1972, p.86. quotes from R.V. Taylor, "Biographia Leodienis",

Leeds, 1865, that he had, "... at one time nearly all the tolls

between Leeds and London, some in Hampshire, Dorset and Wilt-

shire, besides numerous others in various parts of the country."

October, 1840. So, once again, the records of the Witham Navigation have to be used to allow an estimate to be gained of the traffic coming to and from Sleaford on the Witham.

These records produce the following figures between 1836 and 1840.

Year ending:	Slea. Nav external traffic. Est. tonnage to nearest '00 tons.	Est. revenue on this tonnage = 69% of total	Total est. receipts	Amount paid for toll lease.
25.3.1836	11,200	£1,120	£1,623	£1,290
25.3.1837	9,800	£ 980	£1,420	£1,340
25.3.1838	11,800	£1,180	£1,710	£1,340
25.3.1839	12,000	£1,200	£1,739	£1,340
25.3.1840	12,400	£1,240	£1,797	£1,590

Corresponding trends appear in the balances-in-hand and dividends paid by the Navigation.-

Year ending:	Balances-in-Hand (to nearest £)	Dividend (£)
30.4.1836	£1,072	5
30.4.1837	£ 711 ¹	5
30.4.1838	£ 984 ²	6
30.4.1839	£ 951	5
30.4.1840	£1,449	8 (Maximum allowed under the Act.)

1 This low figure was due to the payment of over £600 for the 1836 works at the Paper Mill Lock. See p.207 ff.

2 General repairs to the Navigation that year amounted to just over £200. (Sleaford Navigation Committee minutes, February 6th, 1838) It is for this year that the only figure of actual profits in the 1830's appears. This was, £1,440.17.6d. submitted by the company and found in, "Return from all Inland Navigation and Canal Cos. in England and Wales, 1869 - Return to an Address of the Hon. House of Commons". Dated July 22nd, 1869 and ordered to be printed on April 26th, 1870. In the possession of E.C. Hadfield, Esq.

Now, for the first time, a number of shares were officially noted in the company's records as coming onto the open market for sale. In 1838, one £100-share (no.62) was sold for £90 and in 1839, five £100-shares (nos.75-79) were sold for between £129 and £134 each. In all cases the sellers were non-Sleafordians. Richard Bradley seized the opportunity to increase his holding by two shares while an almost certain relative, the Rev.Charles Richard Bradley, of Queen's College, Cambridge, also bought two.

The peak of share-sale prices had been reached by the early 1840's with the highest price being paid for two £125-shares in 1841. That year saw:

Shares 73 and 74 (£125) sold for £150 each.

Share 70 (£125) sold for £145.

Shares 71 and 72 (£125) sold for £143.10.0d. each.

New constructions. 1836-1842.

a) The Navigation Office.

It was against this background of rising prosperity that a Committee meeting was held to view the state of the Navigation on June 21st.1837. Amongst other business, it was,

"Ordered that a weighing machine for personal purposes¹ on the most improved principal be provided for the Wharf Yard with suitable Shed Counting House adjoining and that Mr.Williams ascertain the price of the machine and other particulars whatever thereof the Tenders for the Building be obtained."

¹ What exactly did "personal purposes" mean? It may have been intended initially that the public should be prohibited from using it i.e. for use only by the "personnel" of the company in which case this would be a very early use of the word (Shorter O.E.D. gives 1857 as earliest use of the word, p.1497)

The reason for a weighing machine is nowhere mentioned officially but it may be guessed at. As a weighing machine was not already installed (at least there is no record of one previously) and all goods carried on the Navigation were tolled at a charge according to their weight, it seems likely that this weighing was performed on some type of manually-operated balance. The quantities of goods being carried were increasing and it is probable that these amounts were now becoming too great for the weighing means then being employed.

A month later, on July 27th. the Committee met again to consider three tenders which had been received for the manufacture of the weighing machine. The lowest was that of Benjamin Cort of Leicester, at 65 guineas, which was accepted. Some discussion about the "Shed" proposed at the earlier meeting appears to have taken place during the intervening period and it was now recorded that,

"Mr. Bradley and Mr. Payne be requested to see to the erection of a suitable house¹ and place to be annexed to the said machine."

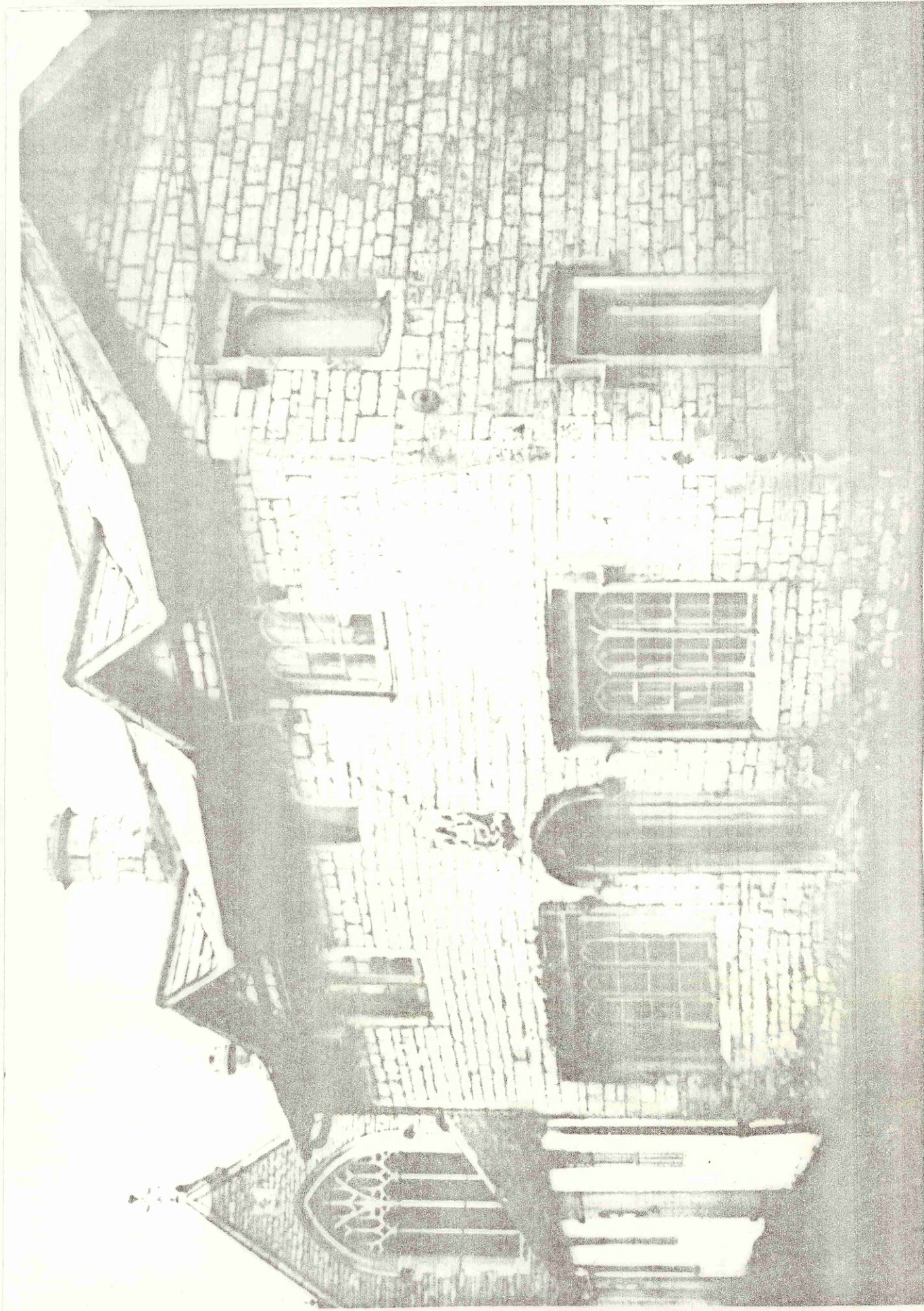
Thus, the status of the building to be erected with the weighing machine now seems to have been altered and a more substantial construction contemplated. This could well have been determined by the healthy state of the trading balances.

The building's status made a further change at the next Committee meeting, on February 6th, 1838. when,

"The Committee received tenders from Mr. Baker of Sleaford and Mr. Bothaway of Grantham for the erection² of a weighing office and clerk's dwelling upon the Wharf Yard according to the plan and Specification now produced to be erected ... for £166."

1 Author's emphasis.

2 Ibid.



The Navigation Office, Sleaford wharf.

Fig.20

From a "Shed" and a "weighing machine" of the previous June, the construction was now to be, after an interval of only $7\frac{1}{2}$ months, an office and a dwelling house, and a substantial one at that.

The contract for the building was signed by John Bothewary and R. Brewin on February 10th. 1838 and the deadline given for completion was June 1st. 1838, just $3\frac{1}{2}$ months. The forfeit for late completion was £2 a month.

The building was finished on time for the Committee meeting of May 7th. 1839 noted,

"To Mr. Bothewary for building the machine house - contract

£166, extras, £25.12.9d." and,

"To Cort, for machine - £69.19.0d."

This figure is over the original estimate and probably included extras, as in the Bothewary case.

That this building must have been finished at least by the middle of June, 1838 is shown by an order in the Committee minutes for June 16th. that year,

"The Arms of the Company to be carved on proper stone and put up over the door of the new office in the Wharf Yard under the supervision of Mr. Bradley."

This structure still stands and is, as far as this author is aware, unique in waterway architecture.¹

b) The wharf crane.

Following the completion of the Navigation Office the wharf crane became due for replacement. The only previous mention of a crane on the wharf appears in a minute for June, 1829, when it was ordered that,

¹ For a full account of this building, see this author's article, "The Sleaford Navigation Office", in "Lincolnshire History and Archaeology", vol. 10. 1975. pp. 23-35.

"... the crane on the wharf to be secured by a lock to prevent accidents and injuries."¹

The initiator of the project for a new one was Joshua Bower, the lessee of the tolls and wharf, and so the existing crane would seem to have been proving inadequate for the loads being placed on it and he was looking to the company for a replacement. After consideration the Committee agreed to the ordering of one with a lifting capacity of 10 tons. Estimates and plans were called for and the old crane was ordered to be sold.

One of the foremost ironwork suppliers in the Midlands at that time was the "Butterley Company", of Alferton, in Derbyshire, a firm founded in 1790 with William Jessop and Benjamin Cutram as two of the four partners.² It was to this company that application was made for a crane and a reply to the Committee's enquiry was received and considered in November, 1840.³ The initial approach from the Navigation had been made through Richard Bradley and he was to be in charge of the whole operation from the Navigation's side.

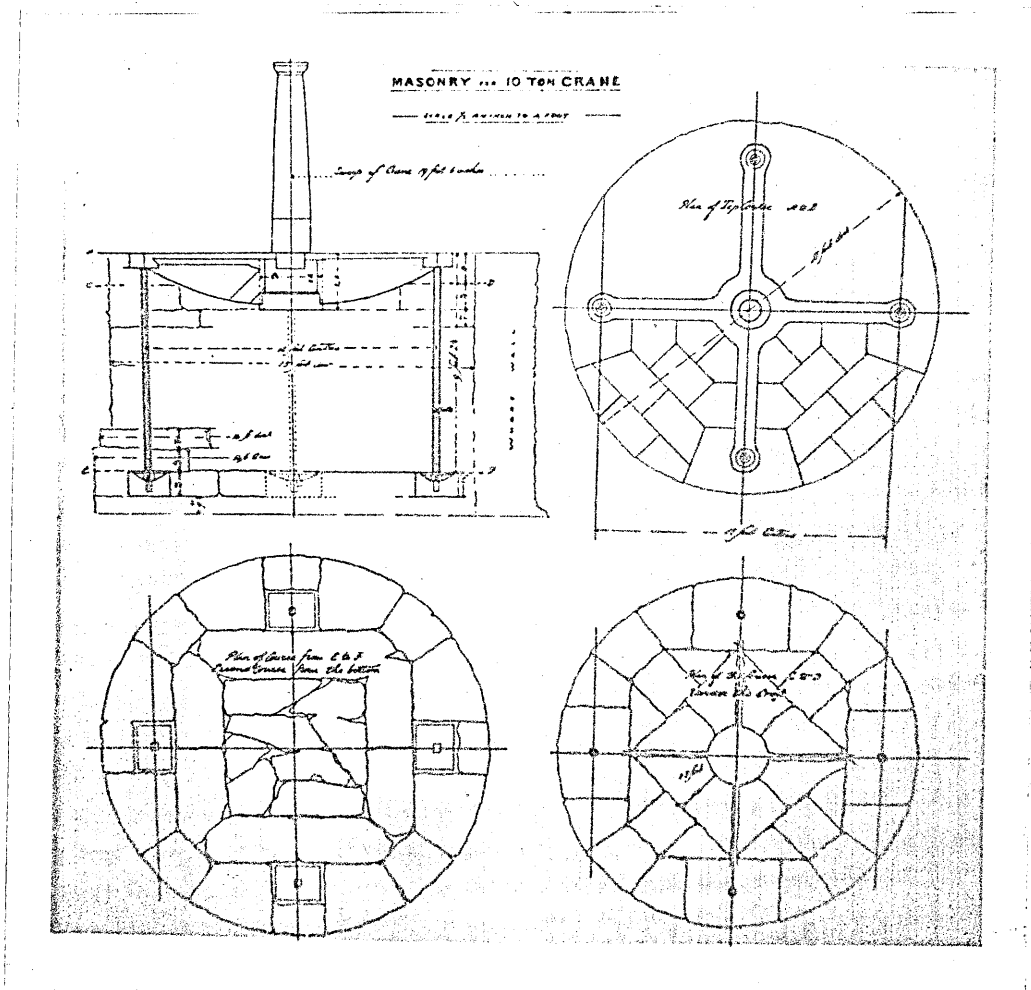
The Butterley Iron Works suggested a 10-12 ton crane with a sweep of 20' and a hoist of 22'. The 10-ton crane complete with chain and one man sent to fix it would cost £280 and the 12-ton, £15 more. The 10-ton crane was agreed upon which, with extras, finally cost £305.

It was erected during August, 1841 and was tested on September 13th. A 10-ton weight of iron was used in the test, which was swung round a complete circle. The only fault found was that a new pulley, or wheel, which carried the chain at the end of the jib, was needed

1 Sleaford Navigation Committee minutes, June 11th. 1829.

2 The other two were Francis Beresford and John Wright.

3 Reply dated, November 9th. 1840 and considered on the 18th.



A plan of the crane erected on Sleaford Wharf in 1841.

(Reproduced from an original in the Committee minutes).

Fig.21

as the one originally supplied was too narrow.

Once one with a deeper groove had been fitted Bradley signified his satisfaction and the final bill was paid. From the time of this payment no further trouble was had with this crane and it is never again mentioned in company records.¹

c) Other constructions.

Navigation Office and the crane were only two of the structures which existed on the wharf at this period. The oldest building, the original warehouse, was still there, as was a woolshed. It is also known that a stall house was there in 1826² but there is no clue to the date of its construction although it may well have been quite early as horses and mules which towed the barges would have needed stabling facilities in Sleaford from the time the Navigation opened. This was sold in 1844 to the Carre Charity for £80.

In 1838 a new 40'-long storehouse was constructed next to the woolshed. Charles Kirk was awarded the contract at his estimate of £95 and it was finished by May, 1839³. The supervision of this building project was again given to Richard Bradley although he was now assisted by John Payne, another Committee member.

Bradley was later appointed to supervise other erections on the wharf when, in 1839 for example, pillars were added to a wall which had been recently finished. Throughout this period he continued to operate in his capacity as a type of unofficial Chairman of a works

1 The crane remained on the wharf and was only dismantled in the early 1940's, probably to supply iron for the war effort. According to the Butterley contract, it had upon it in raised, cast letters, "Sleaford Navigation. Erected by the Company of Proprietors, 1841."

2 Sleaford Navigation Committee minutes, June 15th. 1826.

3 Contract dated, October 1st. 1838.

committee and he is found engaged in a number of activities for the company between 1837 and 1839 - finding the materials for repairs to Howbray's lock, overseeing repairs to Haverholme lock, acting as arbitrator in a water-rights dispute between millers, procuring a "windtap" for sandpanning the river and even designing a gas lamp for use in the wharf yard. The debt which the proprietors owed to Bradley for the time and effort he had contributed was noted in a resolution of a Committee meeting held on July 12th, 1840, just a few months before the negotiations for the wharf crane began with the Butterley Company. The resolution read,

"It was unanimously resolved that the thanks of the proprietors are due, and they are given, to Richard Bradley, Esq., for his time and attention which he has devoted to the interests of the company and for the suggestions which he has from time to time thrown out by which a considerable saving of Expense in the maintenance and preservation of the works has been affected."¹

Trade and leasings, 1840 - 1857.

The improvements in trade and company finances which had taken place before 1840 continued into that decade. The coal trade on the Witham revived somewhat in the late 1830's and this improvement was maintained until 1845, when 28,958 tons was recorded as passing through the Grand Sluice into Boston Haven. Coal remained a vital item in the economy of the Sleaford Navigation and the renewed impetus in the Witham coal trade after 1835 was probably reflected in the Sleaford's figures. However, it is not only in the coal records that this trend can be seen but also in the grain returns.²

¹ Sleaford Navigation Annual General Meeting minutes, May 5th, 1840

² Boston Corporation records, 7/B/1/4.

Between 1840 and 1844 the estimated tonnages passing along the Sleaford to and from the Witham remained relatively constant -

To 25.3.1841	=	11,900 tons.
25.3.1842	=	12,400 "
25.3.1843	=	11,800 "
25.3.1844	=	12,200 "

The Lincolnshire harvests of the first three years had been average but that of 1844 was very good, for wheat in particular,¹ and this is reflected in the estimated tonnages for the period covered by that harvest -

- a) To March 25th.1845 = 13,000 tons
- b) To March 25th.1846 = 14,100 tons.

The trend is repeated in the transported tonnages of grain on the Witham over the same period -

	<u>Wheat</u>	<u>Other grains</u>
To 5.4.1842	42,125 tons	93,072 tons.
5.4.1843	46,322 "	90,534 "
5.4.1844	66,431 "	73,280 "
5.4.1845	93,383 "	47,138 "
5.4.1846	102,236 "	61,359 "
5.4.1847	109,031 "	66,617 "

The harvest of 1844 was so good because there had been little rain after early April and great heat throughout the summer but whereas it had benefited agriculture these conditions had not been so helpful to the Navigation. The then lessee of the tolls, John Hackett, complained to the Committee that due to the lack of water in the river, barges could not negotiate it without their cargoes

1 "State of the Wheat Harvest", by Thomas Aitkin of Spalding. A newspaper (name unknown) cutting, Wheeler Collection, Boston Reference Library.

being relieved by the use of lighters and he requested that two such vessels be employed for this purpose.¹

The prosperity of the Navigation is noted as being derived from the coal and corn trades in a minute of the Grantham Canal Co. of May 4th.1843, in which the merchants of that town requested a reduction of the tolls of that canal as they were under very heavy competition,

"... as an instance, the bulk of corn provided in the country between Colsterworth and Stamford was formerly brought to Grantham market, and coals, cakes and other articles taken in return, whereas this trade had been nearly discontinued in consequence of the Melton and Oakham Canal Companies having considerably increased their tonnage share and making the transit by those lines less expensive than by the Grantham Canal., the extreme charge upon the former being 1d. per ton for every mile for all corn, corn flour and malt navigated thereon. Great competition in the corn and coal trades has also arisen in the districts adjoining Sleaford and Bridge End by supplies being brought up the 40 Foot and Witham Navigations at reduced charges and the groceries and other goods in the London trade are now consigned almost exclusively to Boston and Sleaford instead of Gainsborough as formerly."

This increased corn and coal trade was reflected in the increase in the number of merchants trading in these commodities in Sleaford. In 1826 there had been six and this figure had risen to eleven by

¹ Sleaford Navigation Committee minutes, October 10th.1844.

1842.¹

The coal for Sleaford which was carried by the Navigation came from a number of sources. The best coal was "Silkstone", from just west of Barnsley, Yorkshire, sold in the town for about 2/- a ton more than the next best, that from Clay Cross, in Derbyshire. Both coals, however, cost about the same at the pithead - between 6/- and 7/- a ton. A third coal was from the Flockton (Calder and Hebble) area which had a selling price in Sleaford of between 15/- and 16/- a ton. Besides these three there was one other, that from Newcastle, which was brought by sea to Boston and then sent up to Sleaford by barge. Due to the freightage involved this was the town's most expensive coal, selling at about 24/- a ton, a price which included the 6/8d. per ton freightage costs from Boston.²

1 These were: Joseph Andrews (Carre St.), Joshua Bower, jr. (Nav. Wharf), Wm. Fletcher⁺ (Northgate), John Hackett (Carre St.) John Harston & Son (Southgate), Wm. Martin^{*} (Westgate), Saml. Muston (Southgate), John Nicholls (Southgate), John Payne & Son^{*} (Carre St.)
Jemima Roberts (Old Sleaford), John Smith (Eastgate).

* = coal only, + = corn only.

2 "The Sleaford Standard" of November 15th. 1947 stated, without noting the source, "Mr. Nash would have remembered to speak of the old men to whom he talked when young who told him that the River Slea was their link with the outside world and how, in the last century, people living in isolated farms would watch for the arrival of coal barges at the mill-locks. When this happened the barges used a system of flags to denote the nature of their cargoes and to indicate whether they were travelling upstream or downstream - the farmers would send their wagons down to the lock to meet the coal boats."

A commodity which was entering the trade on the Navigation was oil cake. This came in, as oil seed, from Hull and Grimsby, passed up the Trent to Gainsborough and through the Fosdike. Much of this seed was destined for the new Simpson's oil mill, which was sited between Cogglesford and the Dyer's Mills.¹ Most was exported to London.

The wool warehouse on the Navigation wharf would seem to have been a very necessary building as "great quantities" of wool were, at this time, being sent by water to Wakefield.²

As would have been expected, under these conditions there was no difficulty in finding lessees for the wharf, warehouse and the tolls. When Joshua Bower's contract for the tolls came up for renewal in 1839 he took it again at the increased annual rental of £1,590.³ At the same time the wharf and warehouse contract was renewed by him - at £125 (a 25% increase) per year for six years.

1 Simpson's oil mill was first mentioned by the Navigation in a Committee minute for July 12th. 1839. and then again on June 8th. 1841, when Simpson was requested by the Committee to widen the Navigation next to his mill so that moored boats would not interrupt the movement of other vessels on the river.

2 Coal prices and oil seed details given in evidence before the House of Commons Committee on Railway Bills, "Great Northern Railway (Boston branches) Bill", April 21st. 1847. HLRO.

3 Bower's lease would seem to have been in the name of "Blackbourn and Co." John Gray was their collector - he was also a gamekeeper and farmer of the Sleaford Market tolls. Sleaford Navigation Annual General Meeting minutes, May 4th. 1841, and White's, Lincolnshire Directory", 1842 (Sleaford entry.)

Bower's toll lease ended in 1842¹ when John Hackett, a Sleaford corn and coal merchant, took it for £1,900 per annum for three years. His premises were adjacent to the Navigation wharf in Carre Street. Using the method of revenue calculation already explained, Hackett may have received something just under £1,550 per annum on average and it was most likely the failure to show a profit which led him to allow Joshua Bower to take the lease up again in 1845 for £1,700 per annum, a figure possibly based on the returns expected from more harvests like the one that had just gone, i.e. the wheat harvest of 1844.

Hackett's period of tenure is interesting in that it must be he to whom the following minute of the Trent Navigation Co. applies,

"An application was made on behalf of the lessee of the Sleaford Navigation to be admitted into the boat weighing establishment which it is resolved should be amended to on payment of £20 down and £20 on each future call."²

Although Bower retook the toll lease in 1845 he gave that of the warehouse and wharf up for good then. When this was advertised there was only one applicant so an auction could not take place. In

¹ In White's, "Lincolnshire Directory" for this year (and repeated in the 1856 edition) it is stated that the Navigation extended to Greylee's Pit, about 1 mile west of the town. From these pits clay for brickmaking was extracted. While the upper part of the Slea may have become navigable in the sense that shallow-draught boats could pass along it, at no time did this section come within the Navigation company's authority, neither did it ever authorise any works to be done in the area. Anyway, the Sleaford Navigation Act only gave jurisdiction as far as Castle Causeway.

² Trent Navigation minutes, June 7th. 1844. British Transport Historical Archives.

those circumstances it was,

"Ordered that for the present the same be kept on hand and that the Clerk do make terms with the present superintendant for managing the same by the Week on behalf of the Company. Ordered that the Wharf be advertised to be let by private contract."¹

This superintendant was one, Jabez Stout, and for his services he was allowed £1.8.11d. by the company, representing one week's profits of wharfage. This figure produces an annual average wharfage profit of £76.

One week after this order was made the lease was taken by John Nicholls, a Sleaford coal and corn merchant, brewer and maltster, for £80 a year. This represents a very great decrease in the amount which the Navigation received on the last letting but it corresponds with the trend already established in the toll-lease prices. Apart from the possibility that John Hackett had made a miscalculation and bid too high in 1842, this decrease almost certainly represents the reaction of the merchants and traders of Sleaford to a new and generally welcomed stimulus to the trade of the area - the possibility of a railway connecting Sleaford with the Great Northern Railway main line, the Bill for which was, even then, passing through Parliament. Such a railway could prove to be the financial end of the Navigation as it would be a direct competitor, serving the same markets and carrying the same commodities, but more cheaply, than the Navigation could.

If this was the case, though, why should anyone still be willing to pay for the toll and wharfage leases? Nicholls himself gave the answer when he stated that, as far as he was concerned, by the time any railway reached Sleaford, and so was in a position to rival the

¹ Sleaford Navigation Committee minutes, May 19th. 1845.

Navigation, his term of tenure would be over and so no loss would come to him.¹ Nicholls said this in 1847 and the railway line to which he was referring did not receive Parliamentary consent. Yet, it was realised that it was only a matter of time before a line did connect Sleaford with the mainline which had been authorised in the Great Northern Railway Act of June, 1846.

Nicholls' lease expired in September, 1848. No new takers appeared for it then and the Committee apparently asked him to temporarily supervise the wharf for them. This he did until October 11th, 1848, for which task he received £3. No-one came forward to take the lease probably on account of the railway developments which were that a line was rapidly being constructed from Peterborough, on the Great Northern mainline, through Spalding to Boston and was nearing completion. The Navigation was expecting a loss of traffic, particularly in coal, to this new line.

From that time until April 6th, 1849, William Payne² managed the premises, after which they were taken on lease by a Thomas Standage for one year at £60. The decrease in trade had materialised.

The railway was opened at Boston on October 17th, 1848 and it could not have happened at a worse time for the company. The weather that year played havoc with the operation of the Navigation and, in particular, the rainfall - there was either too much or too little. In May, only 0.18" was recorded, making it the driest May since 1829, while June had 4.22". On September 25th., 1.52" fell, while

¹ Evidence before the Select Committee of the House of Commons on the "Great Northern Railway (Boston branches) Bill, April 21st, 1847

² A "stamp-seller and parcels clerk" in the Market Place, "grocer" in Eastgate and "innholder" of the "Cross Keys Inn". White's "Lincolnshire Directory", 1842.

the total for October was 5.33". To complete the year, it was so cold that winter that the waterways froze. Although the grain harvest had suffered from the deluge there was still a crop to be taken away to the consuming markets. The only transport which could handle it quickly was the railway and this it did. It has been stated that the grain traffic did not return to the waterways after this year¹ but one would be inclined to question this statement, at least with regard to the Sleaford, in the light of the trading situation as it existed throughout the 1850's. What can be said, however, is that the note found in the "Meteorological Journals" of Boston² for December 31st, 1849, summed-up that year and the outlook in general for the Navigation,

"A remarkably dark day."

e/ This did not immediately become apparent in the trading position of the company for some time even though after the good wheat harvest of 1849 that of 1850 was very bad indeed and not confined to wheat alone.

Joshua Bower had taken the gamble to lease the tolls for three years from 1848 and, as well as the railway menace, he was now to lose trade for another reason. In June, 1850, he gave the Committee notice of his intention to relinquish the toll lease for good at the end of this three-year term and, foreseeing possible losses of trade through railway competition on the Boston-Peterborough line, requested that a return of £25 be made to him out of his last year's rent if there should be any falling-off in trade. This

¹This information, without a reference to source, is found in, "Boston as a Port", Wright and Lewis, "Lincolnshire Industrial Archaeological Society", vol.8, no.4. 1973.

² Wheeler Collection, Boston Reference Library.

decrease did occur and Bower was allowed his £25 but not because of railway competition but,

"... on account of a supposed deficiency of the wheat crop in the district in the last harvest."¹

Shortly before the end of his lease communication passed between Bower and William Foster, the Clerk, to establish whether Bower would take the tolls on a yearly basis. There is some evidence that Bower had intimated that he might be willing to agree to this arrangement. The possibility of another proposal for a railway line linking Sleaford with the Great Northern main line, this time at Grantham, may have been known and Bower used this as a means of obtaining a short lease at a very reduced rate. The Navigation wanted him to take the lease for a minimum of one year at £1,500, whereas he was only prepared to accept it at that price for four months. This offer was rejected and so, from September 1st, 1851, the company itself took over the receipt of the tolls² and appointed William Favill as Collector at the Bottom Lock. He had previously been Bower's Collector. He was appointed in the first instance for one year at £1 a week plus a bonus of 10% on everything taken over £1,500 a year.

William Favill did not last long in the company's employment for, at the end of 1852, he gave notice of his intention to leave his post, at which time the Clerk noted,

"... that his wife and family, with a considerable portion of his household furniture, has been moved from

¹ Sleaford Navigation Committee minutes, May 6th, 1851.

² The reason for the company taking the tolls as given in,

"The Canals of Eastern England" by Boyes and Russell (David & Charles), 1977. p.284 is incorrect. This was a time of annual rising receipts, not falling. See also the table of revenues, *ibid.* p.286.

"the lock house to Boston and that he was presently absent from his employment."¹

Favill was given notice to quit by February 1st. next but the problem remained of collecting the tolls in the meantime. William Stennett, the surveyor, came to the rescue by recommending his son, Anthony, to assume the vacated position on the same terms as Favill before him. This was accepted by the Committee.

A taker for the wharf lease was also found about this time, when John Payne, jnr. took it for seven years at £52.10.0d. a year.

For the first five months of his Collectorship, Favill's takings had amounted to, "£743-odd" which, exclusive of the costs of collection, was regarded as a very satisfactory sum. This averages £1,783 per annum in tolls so it cannot be said that the Boston-Peterborough railway could be taking all the corn trade from the Navigation if it was able to return figures like this.

It would appear that it was the coal trade which was being moved mainly by the railway and this is borne out by the tonnage amounts being carried down the Witham to Boston. These fell dramatically once the line was opened,

1845	=	24,958 tons brought to the Grand Sluice.
1846	=	17,495 "
1847	=	19,535 "
1848	=	13,784 " (Railway opened on October 17th. 1848)
1849	=	9,715 "
1850	=	4,655 "
1851	=	3,780 "

After the Great Northern Boston-Peterborough line (actually known as the "Loop") had reached Boston in 1848 it had extended

¹ Sleaford Navigation Committee minutes, December 27th. 1852.

north to Tattershall and large coal marshalling/storage yards had been built there and also nearby, at Dogdyke, almost opposite the point where the Sleaford Navigation joined the Witham. So, coal could be brought to these yards and shipped across the Witham and up to Sleaford by barge. There was also a road which could be used (the Sleaford to Tattershall Thorpe Turnpike) but this was an expensive way to transport coal.

The coal was still, as in 1845 (see p.227), of three types for use in Sleaford. The type most in demand was hard, Derbyshire coal, known locally as "Old Brunswick". Coming by water from Nottingham, it sold in Newark and Grantham for between 9/- and 10/- a ton.¹ By the time it reached Sleaford the cost had risen markedly and the economics of this pricing can be summarised thus,

Cost of coal at pit	=	about 8/- a ton.
60 miles of Navigation to Sleaford	=	8/- " "
Coalmerchant's profit	=	1/- " "
Sleaford selling price	=	17/- to 18/- " "

South Yorkshire ("engine") coal was used in the town for industrial purposes and it was brought by the railway to their Tattershall and Dogdyke depots. Here it could be purchased for between 11/- and 12/6d. a ton. Being on the eastern side of the Witham, this river had to be traversed in order to come up to Sleaford. This crossing was subject to the Witham tolls which amounted to 1/1¹/₂d. at Tattershall and 6d. at Dogdyke (per ton).²

¹ This and the following information relating to coal prices is to be found in the Evidence before the Select Committee of the House of Commons on the "Boston, Sleaford and Midland Counties Railway Bill", June, 1853. H.M.O.

² Evidence of Thomas Farry.

If to this figure is added the 2/- a ton¹ toll on the Sleaford Navigation, the cost of south Yorkshire coal rises to between 13/6d. and 15/- a ton (or 14/1½d. and 15/7½d. a ton) even before any coalmerchant's profit or freight charges on the Navigation are included.

The third coal was house-type from Durham and Newcastle which came by sea to Boston. Only small quantities were taken to Sleaford as it was not of a very high quality. Even so, it sold for 15/6d. a ton.

In 1853 the "Boston, Sleaford and Midland Counties Railway Act" was passed, which authorised the construction of a line between Grantham and Boston via Sleaford. This is dealt with in much greater detail in the next section but, from now onwards, the Navigation's activities were always to be clouded by the shadow of this railway and the threat of competition which it would undoubtedly bring.

Vessels and masters known to be trading on the Sleaford Navigation, 1836-57.

There are three sources for information giving details of vessels and masters (and sometimes owners) known to have been definitely trading on the Navigation during this period. A listing from each source is given below. In addition, there are also those vessels which may have been trading. A full listing of these is to be found in Appendix P.

¹ Whether this was 20 cwts. to 1 ton or whether the reduced rate of 23 cwts to 21½ cwts rate of 1807 was still being applied is uncertain although an avoirdupois measurement is probably implied.

Source 1: Entries in the Trent Navigation Boat Registers.¹

<u>Reg. No.</u>	<u>Load</u>	<u>Draught</u> (with 40 tons)	<u>Date</u>	<u>Owner.</u>
1333	Coal to Sleaford, Boston. Corn to Nottingham and Derby	33.37"	1837	Messrs. Hurst & Carby of Newark.
1437 (late 675)	Coal to Sleaford, etc. Corn to Nottingham.	33.37"	1837	Saml. Barnsdall of Nottingham.
1597	Coal to Sleaford, Corn to Derby, Nottingham and Shardlow	35.40"	1842	Joseph Turner of North Clifton
1737	Coal to Sleaford and Heckington.	34.03"	1855	John Capewell of Heckington

Source 2: White's, "Lincolnshire Directories".

i) Directory of 1842 - Sleaford entry, under "Boat owners",

Thomas Harris of Westgate,

Francis Martin of Banks,

Ann Terry of Northgate,

John Turner of Eastgate.

The general information for this entry also stated that trading vessels left the town for Boston and Lincoln every Tuesday morning. A packet boat, owned by Johnson and Sharp, left the Grand Sluice in Boston for Sleaford every Saturday at 11a.m. and returned by 3p.m.

ii) Directory of 1856 - Sleaford entry, under "Boat owners",

Joseph Gibson of Carre Street,

Messrs Kirk and Parry, Jersey Street,

John Payne and Co., Carre Street - "Trading vessels to
Boston, Lincoln, Nottingham and Yorkshire, from

John Payne and Co's wharf, Carre Street, every week."

¹ RAIL 879. 67-78. British Transport Historical Archives.

Source 3: Sleaford Navigation minutes and accounts - Masters only.

- a) Richard Marriott - "... who navigates a coal boat and trades from Lincoln to Sleaford"¹. He is also entry No.1425 in the Trent Navigation Boat Register (1837) where he is noted as trading coal to Lincoln and corn to Nottingham and Derby.
- b) George Winter - fined £5 for evading toll "in August last".²
- c) William Petchell - charged 10/- for his boat lying in Navigation Wharf.³
- d) Edward Smith - fined £3 for evading toll.⁴
- e) John Borner - mitigated penalty of false loading, £2.⁵

Finances, 1854-57

In the 1850's before the coming of the railway the Navigation enjoyed some financially very good years. At a Committee meeting in March, 1854 it was said that,

"... there had been a gradual increase in the receipts ... and altogether the finances of the company presented a more favourable prospect than upon any previous occasion, whilst the condition of the works was favourably reported on."⁶

That year the company took £1,652 in tolls and the Treasurer presented a balance of £1,800. The maximum dividend of 8% was declared, which still left £520. The knowledge that this sum must

1 Sleaford Navigation Committee minutes, June 1st. 1837.

2 Sleaford Navigation Accounts. April, 1848. 3P3J Lincoln Archives.

3 Ibid. April 1848.

4 Ibid. April 28th. 1848.

5 Ibid. November 25th. 1850.

6 Sleaford Navigation Committee minutes, March 13th. 1854.

not be wasted as it may well be needed in the future to combat railway competition must have been in the forefront of the proprietors' minds, when Richard Bradley proposed and had accepted a suggestion for the purchase of 3/4 Consols with £500 of this sum.

The building of reserves and the elimination of waste pervaded the thinking of the company from then onwards. For example, in the execution of the repairs after the View of 1854, the Committee gave directions to the surveyor that the "utmost economy be exercised" and the expenditure contained within the,

"... narrowest possible limits consistent with the due and proper execution of the several works."¹

The company was also worried about what was probably a spate of frauds being made upon it by the masters of vessels giving a false account of their loadings.² Membership of a Combination Society was seen as one way to overcome the problem and the Clerk was instructed to obtain information as to the terms upon which the company could join. This would probably have been the scheme operated by the Trent Navigation and the one joined by John Hackett in 1842 when he was lessee of the tolls.³ The company does not seem to have pursued this suggestion.

The summer of 1854 was very hot and, from July until October, there was a drought in the region. The lack of water nearly caused the Navigation to be suspended and toll receipts fell, reaching a monthly low of £93 in September. The accumulating grain had to be

1 Sleaford Navigation Committee minutes, June 21st. 1854. A similar instruction had been issued on June 21st. 1853.

2 See, Source 3:e, p.238.

3 See p.229.

moved as soon as there was water enough and a recovery in toll receipts took place thereafter, reaching nearly £300 in December.¹ Then, in early January, 1855, an intense cold spell froze the waterways. William Stennett, the surveyor, reported to the Committee on the 29th. that the Navigation had been suspended for nearly a fortnight and that there were large amounts of merchandise awaiting its opening - probably grains. The suggestion was made to open the river with an "icebreaker", an iron boat drawn by a team of horses. This would not appear to have been successful, if it was tried at all, as no tolls were collected throughout the whole of February. This set-back to trade produced a low toll-receipt total for the year ending March, 1855, of about £1,685 which, after the payment of bills and an 8% dividend, left £64 in the hands of the Treasurer.

The company's fortunes continued to prosper even though the new railway was now under construction and moving from Grantham towards Sleaford. In reality this was an "Indian Summer" for the Sleaford. In 1855 the harvest was extremely good and much of it was taken out by water although it is known that some did go overland by road as well as rail. In February, 1856, the Committee summed-up the position thus,

"... a net sum of £2,028 may be estimated as the probable amount to be realised in the entire financial year - an amount exceeding any former year's income ... there is reasonable ground for anticipating a result more encouraging than has previously occurred since the opening of the works."²

1 So much for the suggestion that all south Lincolnshire grain was carried by the railway after 1848! See p.232.

2 Sleaford Navigation Committee minutes, February 25th, 1856. The optimism of this minute must lend support to the postulation that the railway was to end at Sleaford and not go on to Boston. See p.264.

The anticipated sum was not quite achieved in the year up to March, 1856¹. There had been a decrease in the tonnages carried during the first ~~three~~ months of the year and the Committee had based their estimate on the average toll-receipt for the ten months ending in January, 1856. Just over £1,600 was the balance-in-hand at the Annual General Meeting of 1856. An 8% dividend was declared and a further purchase of £500-worth of Consols was ordered from the £350-odd which remained, so bringing the total Consol holding to £800.

During the following year, ending March, 1857, the greatest total ever taken in tolls - £2,124 was achieved and there must have been a certain amount of satisfaction amongst the proprietors when they assembled for their annual meeting on May 5th. that year. After another 8% dividend had been ordered to be paid it was decided a further £200 should be invested in Consols, making £1,000-worth in total held by the company.

Unclaimed dividends, 1838-57.

Another aspect of the company finances which should be considered is the situation regarding unclaimed dividends. A list of these had first been requested by the Committee in early 1838² and this was delivered to their meeting on May 1st and also considered at the Annual General Meeting held on the same day. Four shareholders were then noted as not having claimed; the Rev. John Moore Brooke, William Byre, jr., James Guthrie and Henry White. Their share details can be summarised thus,

1 The amount received was £1,994.

2 Sleaford Navigation Committee minutes, February 6th, 1838.

<u>Shareholder</u>	<u>Amount of</u> <u>Unclaimed dividend</u>	<u>Share No.</u>
Rev. John Moore Brooke	£ 65 ¹	25
William Byre, jr.	£104 ²	63,64
James Guthrie (assignees)	£206	75-79 incl.
Henry White	£ 40	?

This final share, that of Henry White, is probably No.135, which was the final one purchased, being sold in 1801 to William White of Timberland. But no transfer is noted in the Share Transfer Book as having affected this share although the shareholder's name is elsewhere given as William Henry White.³

It was decided that the total of £469 to which these unclaimed dividends amounted should be invested in Government funds and the dividends arising therefrom to be available for the use of the company. Further, any additional unclaimed dividends arising in the future were to be paid into a special account at the "Peacock, Handley and Kinton Bank" in the name of the company.

The Clerk was instructed to investigate the titles of all the shares as they were shown in the Share Transfer Book and to suspend payment of dividends on any which appeared doubtful.

1 and 2 From this information the amount of the supposed dividend of 1812 can be calculated (see p.179). If in both cases the $2\frac{1}{2}\%$ dividend of 1795 is assumed to have been paid, the total amount paid in dividends on a £100-share up to and including the payment of 1837 is £52. William Byre, jr. had 2 x £100 shares = £104 outstanding, which is the amount noted in the above table. This would indicate that no dividend was given in 1812, even though the company minutes say there was one. A similar result is obtained when the Rev. Brooke's £125 shares are likewise analysed. See also Appendix C.

3 Sleaford Navigation Committee minutes, May 4th.1847

There the matter rested until the next Annual General Meeting. A 6% dividend had been declared in 1838 and so, by May 7th, 1839, the day of the meeting, a further £55 remained unclaimed, made up of,

To. Rev. John Moore Brooke	=	£ 7. 10. 0d.
William Byre, jr.	=	£ 12. 0. 0d.
James Guthrie (assignees)	=	£ 30. 0. 0d.
Henry White	=	£ 6. 0. 0d.

Nothing was done and the money went straight into the new account at the bank. Then, a few weeks later,¹ the Committee received a claim upon two of these accounts. A representative, or "executor" of the Rev. Brooke and the assignees² of James Guthrie (who had been declared a bankrupt on June 2nd, 1839) pressed their claim. These claims were agreed to.

No further claims were successfully pressed and in 1848 it was resolved that no further dividends should be made on the White share. When the Navigation closed the Byre and White dividends had still not been claimed.

Alteration to the total share capital of the company.

In 1848 a reference was first made in Committee to a share which, although seeming highly unlikely, appears to have been overlooked by the company until that time. This was No. 80 and was originally purchased by Henry Gee. He is thought to have sold his share to Erasmus Darwin, jr. (the son of Dr. Erasmus Darwin) on July 9th, 1794. The Share Transfer Book says,

"No evidence of this sale has been produced and no dividend claimed by anyone. Wm. Foster."

¹ Sleaford Navigation Committee minutes, July 12th, 1839.

² James Thorpe, jr., merchant, and Samuel Sketchley, wine merchant, both of Newark.

In 1799 Erasmus Darwin jnr. committed suicide by drowning in the River Derwent. The motive would seem to have been money worries.¹

The problem of this share was left for 10 years until a decision was made concerning it. On May 8th, 1858 the Committee stated that they believed that this share (£125) had never been subscribed,

"... although the name of the late Henry See, Esq. was attached thereto, nor have any dividends ever been claimed by, or paid to, any person pertaining to be the owner thereof since the Navigation was constructed."

They were certainly incorrect in thinking that the share had not been paid up as no-one was in default on the calls. Most likely the share became lost, mislaid, or anything, after the sudden death of Erasmus Darwin, jnr. and this share document may still be amongst the papers of the Darwin family.

However, having resolved the problem by saying that the share had never existed, the total share capital of the company had to be reduced and so it was declared as being £15,875 in future, instead of the original £16,000.

¹ "Erasmus Darwin, 1731-1802", King-Helo, p.37

PART EIGHT

THE NAVIGATION AND THE RAILWAY, 1825-1859.

The Navigation and the Railway.

The first railway/canal proposals for Sleaford.

Although "railroads" had been known in this country for many centuries, the modern railway era is commonly taken as beginning on September 27th, 1825, with the opening of the "Stockton and Darlington Railway" to commercial traffic.

That being the case, the "railway age" could have come to the Sleaford area very much earlier than it did if things had progressed according to plan.

The suggestion for a possible railway came, rather surprisingly, from the Witham Navigation Commissioners and not, as might have been expected, from Sleaford residents. A few miles to the west of the town lie the villages of Ancaster and Wilsford and form the centre of an area of quarrying, the limestone of which was then used extensively in local building works. The Witham Navigation speculated that this, essentially local, trade might be extended to other parts of the country and, particularly, to the London market where it could compete with the Bath Stone which was then dominating the dressed-limestone section of the trade. The Lincolnshire limestone would need to be transported to that market and the probable intention of the Witham Commissioners would have been to take it to Boston and then send it on by sea to London. However, before it could reach Boston it had to be brought from the quarries and so a problem arose as this would entail a road carriage to the nearest waterway wharf, that at Sleaford. Road transport for heavy, bulk goods like limestone blocks would have been the most expensive way to move this commodity when the alternatives, a canal or railway, were viable propositions.

The whole question was discussed at the Witham Navigation's Committee meeting on March 21st, 1827, at which it was suggested,

"... a great advantage would arise to the Witham Company if the Stone in the extensive Quarries at Wilsford could be got into the London Market at a price to compete with the Bath and other Stone sold there but that such cannot be effected unless an improved line of communication be made between the Quarries and Sleaford by a Water Conveyance, a Rail Road, or perhaps both, as may best suit the line of the Country."

The Witham Commissioners established a sub-committee to investigate the scheme and to obtain all necessary information. This sub-committee consisted of four members of the Witham Committee, Edward Fowler, John Keyworth (the lessee of the Sleaford tolls), Mr. Merryweather and Mr. Thackray, the Witham's surveyor. If they found that the scheme was practical they were further instructed to obtain legislative or other powers for bringing the plan to completion.

It was Mr. Merryweather who kept the Sleaford Committee informed and he wrote to William Forbes, the Clerk, the next day¹ and, although the actual communication has not survived, it probably laid out the scheme, together with the intentions of the Witham Commissioners, and asked for his reactions.

A chaise was hired for viewing the line of the proposed works and the sub-committee went on March 24th.² What their conclusions were are not recorded but a second look, by just Merryweather and Thackray, was ordered on April 4th.

The outcome was favourable and the Witham Commissioners decided to go ahead with the project. Accordingly, Merryweather again wrote

1 Sleaford Navigation Annual General Meeting minutes, May 1st. 1827. mentions the receipt of this letter.

2 Cost of chaise hire and expenses came to £5.8.6d. Paid to Merryweather on April 4th. 1827. Witham Navigation Minutes.

to Forbes at Sleaford.¹ In his reply of March 22nd, Forbes had probably given approval to the plan as could see it bringing greater revenues to the Navigation and also as being a project which would be of advantage to the people of Sleaford and the surrounding neighbourhood. Merryweather had been instructed to ask Forbes to lay the resolution of approval to the plan by the Witham Commissioners before the Sleaford Committee,

"... to adopt such measures as they may deem proper for the purpose of carrying the same into effect."

It was only at the Annual General Meeting of May 1st, 1827, that the first mention of the scheme appears in the Sleaford's records. William Forbes presented both letters from Merryweather and presumably explained the idea behind the plan. The meeting of shareholders agreed to it in principle. They could see that if brought to fruition it would be of great advantage to the company but before anything could be started, consultation had to take place with the Marquis of Bristol and the other landowners through whose estates the proposed line of the railway and/or Navigation must pass.

Whilst this consultation was taking place the Witham Commissioners made a decision which, one would have thought, should have been made somewhat earlier. They do not seem to have ascertained the market potential for the stone - they did not know if it was of a sufficiently high quality to sell well in London. To resolve this Thackray was told that when the sub-committee next visited the Wilsford quarries he was to purchase 20 tons of the best quality limestone and send it to Messrs. Wake and Daniel, stone merchants, of Millbank Street, Westminster, London,

¹ Sleaford Navigation Annual General Meeting minutes, May 1st, 1827.

Letter dated, April 25th.

"... who have proposed to accept the same on their own Account at 2/- per foot, the Bath stone price, and exhibit for sale to the Principal Consumers in the Trade, that a fair Estimate may be formed of it before further trouble and expense be incurred."¹

It was agreed that the loss which would result due to the difference between what was paid for the stone at the quarries, plus the freightage to London, and the 2/- a foot price at which it would be sold there, should be met by the Witham Navigation,

"... as an experiment to ascertain its real value."

Messrs. Wake and Daniel agreed to enter into a contract with the quarries for an annual supply of the limestone if the sample should meet with the approval of the London buyers.

And on this note of expectation the scheme is heard of no more! There is no further reference to it in either the Witham or Sleaford records. It is doubtful if it was dropped because of opposition from the landowners to the passage of the line of communication to be built as the two companies would surely have recorded their efforts to persuade them otherwise. It must have been due to something outside their influence and this could only have been a poor reception for the limestone in London when it was realised what the true cost of it would be when navigation(s), or a railway, and sea-freightage costs were taken into consideration.

Even though nothing came of the railway idea, it is tantalising to speculate on exactly what type of motive power the promoters had in mind for it. Was it to have been a steam locomotive-hauled line, in which case it would have been one of the first in the world, or was it intended as a horse-drawn railway? We will probably now never know.

¹ Witham Navigation minutes, May 19th. 1827.

The Rofe and Son plan of 1833.

The above-mentioned scheme involved the possibility of a water link as well as, or alternative to, a railway. As with the railway, the canal idea was not pursued but, in 1833, a plan was published by the Birmingham engineers, J. Rofe and Son, which proposed a junction canal linking the Grantham Canal with the Sleaford Navigation.¹

At that time,

"... the products of Birmingham, the Staffordshire Iron Works, the Potteries, Leicester, Coventry and the central counties generally can only be conveyed to the East Coast by canal to Nottingham and thence by the River Trent and Humber to Hull or by the Trent, the Foss Dyke (or new navigation to Lincoln) and the Witham River to Boston."²

With the route then existing from Nottingham to Hull, the carriage of cargoes was often delayed due to the poor control of water on the Trent, which was prone to either flooding or a water deficiency. This caused traffic operations to be suspended for weeks or,

"... in some cases for MONTHS together."³

1 "Description of a plan for a junction canal between Grantham and Sleaford, to connect the Staffordshire Iron Works, Potteries, and the whole central inland navigation of England, with the sea at Boston, without the liability of flood or short water, and without shifting boats." J. Rofe and Son, Birmingham, 1833. Trans. of the Inst. of Civil Engineers. Vol. 98.

This revived a proposal which was part of the Grantham Canal's intended construction and is contained in its Act of 1793 but which was never constructed. No mention of this early link appears in the Sleaford Navigation records.

2 Ibid.

3 Ibid.

This through route also had the inconvenience of delay and possible damage to merchandise at the trans-shipment points of Shardlow (for the Trent and Mersey Canal) and at Gainsborough, at the head of navigation for coastal shipping on the tidal Trent, together with a difficult entry for boats into the Fosdike at Torksey.

The Rofe plan was based on the fact that the Grantham Canal connected with the Trent at West Bridgeford (Notts.) and its termination at Grantham was only about 14 miles from Sleaford, from where a direct link with the sea at Boston could be obtained for all the canals connecting with the Grand Trunk Canal. The advantages of such a scheme were seen in the shorter distance to a port-outlet than Hull provided, no need for trans-shipment and a more reliable service due to a more assured water supply.

The route selected in the plan rose north-east of Grantham to Barkston and Willoughby Heath, where a 2½-mile long tunnel through the limestone escarpment of Lincoln Edge was proposed which would emerge in the Ancaster Gap just north of Willoughby Hall. It would then sweep in a loop north of Waterloo Farm and on south past Wilsford. Entering Wilsford Warren the line approximates that followed by the present course of the railway into Sleaford and it was to join the Sleaford Navigation on the southern side, opposite the wharf.

The total length of the cut would have been about 16 miles and Rofe stated,

"... its course will not injure or annoy the residence of any landed proprietor."

Lockage would have been one way and this would have been advantageous in that only one lock of water would have been lost by every vessel passing along the whole length.

The scheme did not mention the possibilities for the transportation of the Wilsford and Ancaster limestone even though the line of the

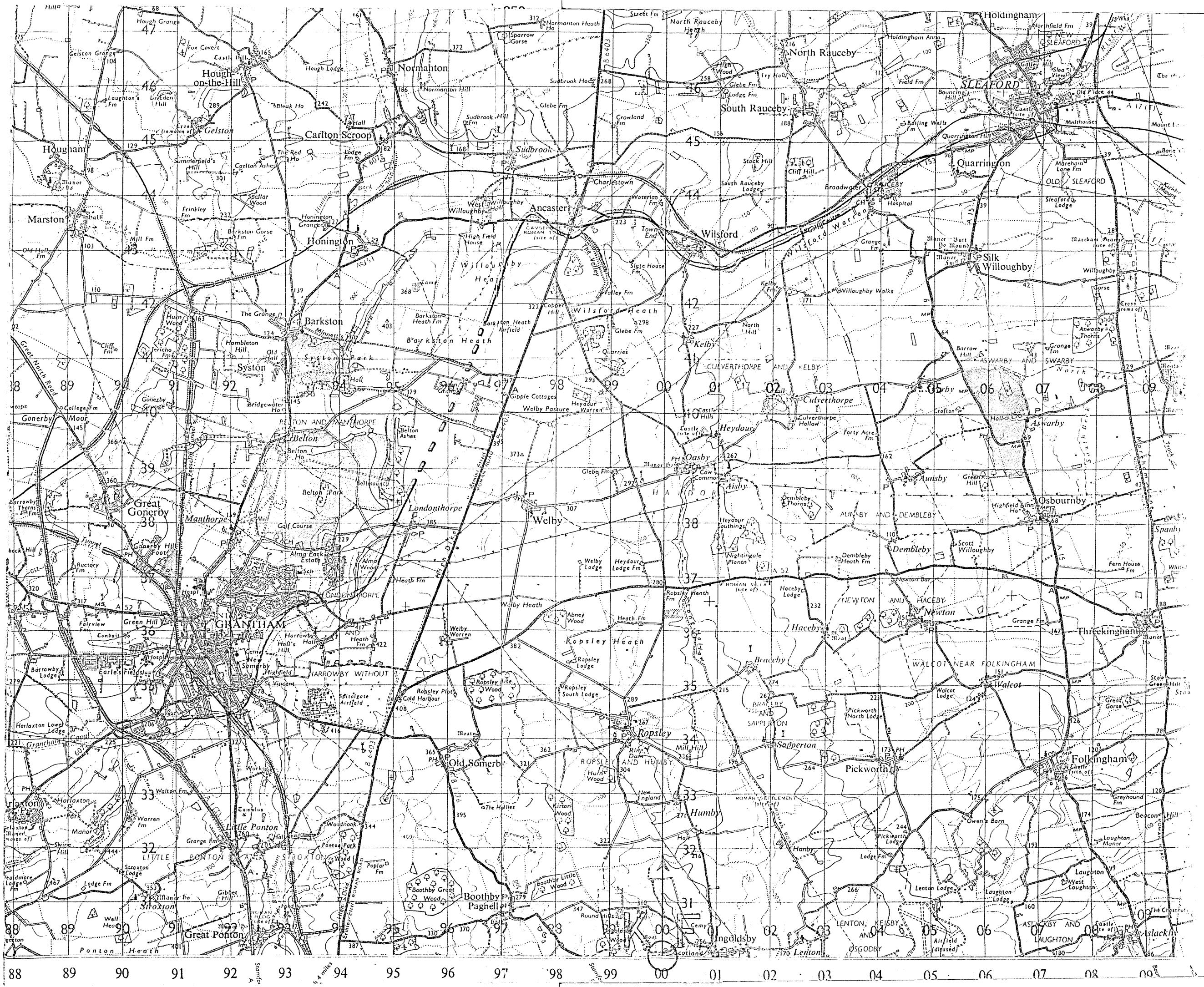


Fig.22

THE PROPOSED ROUTE FOR A
JUNCTION CANAL BETWEEN
GRANTHAM AND SLEAFORD.
J.ROFE & SON, 1833.

KEY:
—— LINE OF
- - - TUNNEL

proposed canal was to pass by them. This only reinforces the speculation made earlier that this limestone was not considered important enough just then to justify the high freightage costs to the main markets in the south of England. What was needed was a cheaper means of transport than canals.

This junction canal has unknown origins as no mention of it appears in either the Sleaford or Grantham Canal records. Yet, as with the Witham's proposals of 1827, no construction was ever undertaken. Although nowhere stated this must have been because the plan was totally uneconomic - Boston did not possess a wet dock and the Haven was susceptible to silting and, anyway, the tidal nature of the lower part of the Trent provided free power for the vessels using it. Also, the plan may have been overtaken by events for by the time the scheme was published other projects, now in the form of steam railways, were being talked about and planned.

Railway "Manie" and the Ambergate to Boston line.

In 1836 the prospectus for a line from Nottingham to Boston, passing by way of Sleaford, was produced.¹ This line had great support from the town of Boston but it failed to attract sufficient subscribers and it was abandoned.²

Railway projects for Lincolnshire rested here for some years but the main lines from London were stretching in all directions and those coming northwards were nearing the borders of the county. The advantages which they were bringing to the areas through which they passed could be seen by all, although the disadvantages, especially environmental, were also readily dismissed. The two main lines which were to have the most profound and significant effects on the Sleaford Navigation were the "Eastern Counties Railway" and the "Great Northern Railway".

1 Prospectus dated, June 29th, 1836.

2 "Lincoln., Rutland and Stamford Mercury" for August 16th, 1836.

Between 1836 and 1845, the "Eastern Counties"¹ had been moving north from its base in Stratford, East London, and had arrived at Peterborough. From there the company ran a regular road goods service to Boston in possible anticipation of the extension of their line into Lincolnshire.

The history of the railways in Lincolnshire is extremely complicated, for example, there were 39 Railway Bills concerning the county before Parliament in the 1845 Session² and so, for simplicity, the inter-relationships between proposed railway lines will not be considered in any great detail here.

The first railway of the 'Mania' period to affect Sleaford and which demanded the attention of the Committee and proprietors was the "Ambergate, Nottingham and Boston and Eastern Junction Railway". The scheme was that the cotton, silk and lace-manufacturing town of Nottingham, supporting then a population of over 100,000 would, by the connection of this proposed line with the proposed "Manchester, Buxton, Matlock and Midland Junction Railway" (later part of the Midland Railway), reduce the distance from Nottingham to the ports of Liverpool and Manchester by upwards of 70 miles compared with the existing routes. It would also put the eastern ports of Lincolnshire and Norfolk within a few hours journey of the western seaports. In other words, what the Rofe junction canal planned to do in 1833 was to be achieved by the railways.

The trade which would be forthcoming on completion was set forward in the company's prospectus, issued on September 27th, 1845.³ The line would run from Ambergate in Derbyshire, through Nottingham

1 Later part of the "Great Eastern Railway".

2 "History of the Great Northern Railway", C.H. Grinling, p.33.

3 RAIL 1075/90. British Transport Historical Archives.

and Grantham, to Spalding, with branches to Sleaford and Boston. As it would pass through the Nottingham and Derbyshire coalfield areas and, by its junction with the "Midland Railway" at Ambergate and its proximity to the Millstone Grit and Carboniferous Limestone quarries of Nottinghamshire and Derbyshire, these three materials would be available to those areas in the east e.g. Sleaford, where they were not all naturally available. It was estimated that the line would reduce coal prices in Lincolnshire by 50%. In return, the cattle and corn of the county would find its way to the industrial markets of the Midlands and North-west.

A supporter of this railway and a member of its Committee of Management was Richard Bradley, the Sleaford Navigation shareholder, Committee member and active supporter. Why should he be supporting a railway which could have meant the end of the Navigation as it would be operating in direct competition with it? His motive would seem to be that private profit and public good had to be compatible. Although he had done much for the Navigation it appeared to him that this railway would be personally beneficial in his business life and would also be more advantageous to the local populace than a Navigation, remembering that not only was the Sleaford in danger of closing but that also the Grantham would be similarly affected.

When the Ambergate scheme was laid before the House of Commons Select Committee on Railway Bills a petition against it was presented by the inhabitants of Sleaford. A Mr. Alexander appeared to represent the petitioners but his attendance was rejected on the grounds that the inhabitants of any particular place did not have sufficient interests to entitle them to an individual representative before the Committee.

On July 16th, 1846 the Ambergate Railway obtained an Act, so a line now had Parliamentary sanction to connect Sleaford with a railway. The reaction in Boston to this Act was that,

"...the bells rang ... and bonfires were lighted at the news."

But an Act passed did not necessarily mean a line built.

The "Eastern Counties Railway" scheme.

1846 saw the introduction into Parliament of a scheme presented by the already-established "Eastern Counties Railway". A line was proposed to link Cambridge with Lincoln and was to have two branches to Boston. One of these was to run from Market Deeping and pass through Spalding and the other was to go to Heckington and have an extension to Sleaford.

When the "Eastern Counties Railway (Cambridge and Lincoln line) Bill" was presented to Parliament the Sleaford Navigation petitioned against it.¹

The Bill only reached a Second Reading, after which it was abandoned. However, what was the Navigation's objection to it? Was it because a successful railway would mean the demise of the waterway or was it some other factor? From the evidence taken in Parliament on this Bill it is impossible to answer as the Navigation did not present any witnesses or have its case heard. However, it can be so answered from later sources, in fact, from railway evidence taken in the following year on the "Great Northern Railway (Boston branches) Bill". (see below)

The "Great Northern Railway" scheme.

A few weeks before the Ambergate line obtained its Act the Royal Assent was given to the "Great Northern Railway Act".² This authorised the building of a line between London and York, via

¹ House of Commons Journal, vol.101, pt.1, p.650. May 7th.1846.

The order to present this petition is noted in Sleaford Navigation Committee minutes, April 27th.1846. and Annual General Meeting Minutes, May 5th.1846.

² 9-10 Vict. cap.71.

Peterborough and Grantham.

The "Great Northern Railway" wanted to be able to take Nottinghamshire coal to the port of Boston, coal which would originally have to be carried by the Ambergate company and which would cross the Great Northern mainline at Grantham. In order to ensure supplies, the Great Northern began negotiations to lease the Ambergate line even before it was finished being constructed.¹ The Ambergate board of directors rejected the offer as they anticipated a better one coming from the "Midland Railway", with whom they connected at Ambergate station.

Having failed in this, the Great Northern introduced a Bill for a line from Boston through Gosberton (where it could make a link with the Ambergate line) and Sleaford. This would be made possible as the Great Northern was building the "loop line" from Peterborough through Boston to Lincoln and Gainsborough. This Bill was examined in Parliament in April, 1847.

Appearing as witnesses at the examination of this, the "Great Northern Railway (Boston branches) Bill"² were William Foster, the Clerk to the Navigation and John Nicholls, the lessee of the Navigation wharf and a Sleaford coal merchant.³

Foster gave evidence in favour of the railway. This is a most surprising thing to find happening - the Navigation was committing suicide. This tells us a great deal about the people who were running the Navigation and demonstrates that their attitude must have been the same as that displayed by Richard Bradley regarding the Ambergate Bill. It must have been realised that there was so much agitation

¹ "Lincoln, Rutland and Stamford Mercury" for January 29th and February 26th, 1847.

² House of Commons Evidence on Railway Bills, vol. 75. HLRO

³ Evidence given on April 21st, 1847.

in favour of a railway passing through Sleaford, connecting the town with Boston and the main line to London and the Midlands, that resistance to the fact of a railway was no longer realistic from the Navigation's point of view. A railway would come and, as could be seen in other parts of the country, waterways in direct competition with them has little chance of an independent economic survival. The good of the community, as far as trade was concerned, could be served better by the train than the barge. However, there had been a number of proposals for railways through Sleaford - the decision as to which was best for the town and district had still to be made. It was for this reason that the Navigation had opposed the Eastern Counties' line from Cambridge to Lincoln and, as was made clear in Foster's evidence, the inhabitants of Sleaford had been unanimous in their approval of an earlier, failed line, called the "Boston, Newark and Sheffield Railway".¹ For similar reasons of advantage Sleaford had petitioned in favour of this, the Boston branches line, as against the Eastern Counties proposals as it would provide the town with much better access to the north and south. Also, the distance to the markets of Yorkshire in particular would be shorter by this line and its link with the "Sheffield and Lincolnshire Junction Railway" than by the route proposed by the Eastern Counties.

Foster's and Nicholls' evidence was mainly concerned with the effects the railway would have on the existing trade of the area and it is this description of the trade which gives an insight into the Navigation's commercial situation in the middle of the 1840's.

1 Came before Parliament in February, 1846 but abandoned the following month.

2 This evidence is incorporated in the section "Trade and leasing, 1840-57", pp.227-8.

It is evident that a reduced price for coal was the most important item as far as the railway argument was concerned. Corn and agricultural produce received only scanty mention. In reply to questioning Nicholls estimated that about 15,000 tons of coal came into Sleaford each year.¹

Despite the support which this Bill received from the Navigation it failed to secure an Act.²

The 1846 Session of Parliament had seen the passing of the "Great Northern Railway Act" and work began on the "loop line" from Peterborough to Boston in the early part of 1847. It was opened on October 17th, 1848.

The Boston junction station with the "East Lincolnshire Railway" was advantageous for the agricultural districts lying near to that town but what about Sleaford, situated as it was, midway between the Boston station and the Great Northern mainline station at Grantham?

The Ambergate line, of which such high hopes had been entertained, proved to be financially unsound and only that section between Nottingham and Grantham was constructed; it did not extend through to Boston and Sleaford.

The "Boston, Sleaford and Midland Counties Railway" scheme.

Four years were to pass before anything more was heard of a railway scheme for Sleaford. In 1852, the "Boston and Midland Counties Railway and Dock Company", more commonly called the "Boston, Sleaford and Midland Counties Railway" was formed.

¹ During the last full year when tonnage figures are available for trade to Sleaford from Boston and Lincoln i.e. up to September 29th. 1845, a total of 14,944 tons is obtained using the method of calculation mentioned earlier. This close comparison perhaps validates the method used.

² "Lincoln, Rutland and Stamford Mercury" for August 27th, 1847.

This line proposed to take up where the Ambergate had left off and link Boston with Grantham, via Sleaford, with provisions to construct new docks at Boston.

a) Sleaford's support for the line.

The promotion meeting for the line was held in the Sleaford Assembly Rooms in September, 1852.¹ In the Chair was Edward Newbatt, the agent of the Earl of Bristol. Newbatt had held one share in the Navigation but had sold it in 1846, perhaps anticipating that the "Ambergate Railway Bill", then before Parliament, was likely to succeed and the value of that share would be reduced in the face of the competition which would then be presented.

At the meeting, Newbatt stated that he had been an advocate of the original Ambergate line and it was reported that,

"He thought it would do well to go heart and soul with the deputation because, if they failed now, they might despair of ever getting a railway at all."

A brief account of this meeting survives and in it the reaction of the local people to the railway's proposed advent is graphically described,

"The object of the proposed railway was explained to the meeting and, upon its being made known that it was necessary the neighbourhood of Sleaford must take a considerable number of the shares to enable the Company to go forward, it was perfectly extraordinary to see how both the large and small shopkeepers came forward and

¹ Reported in the "Illustrated London News" of November 6th. 1852, vol. 21, no. 552. PER34/21. British Transport Historical Archives. The dateline is, "... held on Friday week", which would put the meeting on September 28th.

applied for shares, even while we were in the room.

Someone said at the time it was more like the bidding at an auction."¹

This rush to buy shares could have been motivated by speculation but Anthony Willson, the Navigation Chairman, told counsel on his examination before the House of Commons Select Committee on the "Boston, Sleaford and Midland Counties Railway Bill,"

"Most decidedly not with the view of speculation but I know certainly in several ways. In one instance I was speaking to a tenant farmer and in answer to such a question he said he knew little about railway speculation but what he did know from hearing about railway speculation was bad and that persons mostly lost their money by it, that he had plenty of ways of disposing of his capital profitably without resorting to it and that being convinced the proposed railway would benefit the locality he intended to apply for shares."²

1 Evidence of Anthony Willson, Sleaford Navigation Chairman, before the Select Committee of the House of Commons on Railway Bills, "Boston, Sleaford and Midland Counties Railway Bill", June 3rd. 1853.

2 This sentiment occurs again in an undated and unsigned letter, but which was almost certainly written by Anthony Willson, "At a recent meeting held in that town (sic) on its being announced that the inhabitants must do all they could in the taking of shares, the demand made for shares in small numbers, such as 5, 10 and some few of 20, were more like the bidding in an auction than anything else and this was entirely without the least feeling of speculation" British Transport Historical Archives, RAIL 1066/306.

Many of the Navigation's more influential supporters and shareholders were similarly inclined towards this line, as evidenced by the railway's prospectus. Indeed, in the Parliamentary evidence of William Foster, the Navigation's Clerk,¹ he stated that the Navigation was fully in favour of the scheme and, accordingly, no petition was presented against it. These dual supporters were, Anthony Willson, Maurice Peter Moore, William Hungerford Holdich (Navigation Treasurer), William Foster (Clerk), John Warwick, Benjamin Snow and John Payne. Six millers and maltsters of the area also allowed their names to be printed in support in the prospectus.

b) The prospectus.

The details given in the prospectus² of the line are rather sparse. It noted that the failure of the Ambergate line in 1847 meant that Hull and Grimsby, rather than Boston, had still to be used as ports by the Midlands' manufacturing towns, in particular, Birmingham, Derby, Nottingham and the "Potteries" towns about Stoke-on-Trent. Boston's more advantageous position, compared with Hull and Grimsby, was mentioned, being 30 miles nearer to Nottingham than those two ports. The significance given to this was reinforced by the title, "Key to the Midlands" being applied to Nottingham. The idea of the railway was to link with the Ambergate at Grantham and,

"... it has considerable support, both amongst the landowners affected by the line, and the commercial and trading communities of Boston, Sleaford and surrounding districts."

¹ On June 3rd. 1853.

² This prospectus is dated, "1853?" (handwritten). This date must be incorrect, seeing that the promotion meeting was held in September, 1852. British Transport Historical Archives, BAIL 1075/96.

a statement which has already been seen not to be in any way an exaggeration of the situation.

c) Petitions against the Bill.

When the Bill for this railway was introduced into Parliament it was not without opposition. Four petitions against it were presented, by the parishes of Sutterton, Kirton and Frampton; the "Ambergate, Nottingham and Boston and Eastern Junction Railway"; the Black Sluice Commissioners and the 2nd. District Drainage Commissioners. As the petitions themselves have not been preserved the reasons for their presentation can only be guessed at.

The parishes probably considered this line as a rival to the Great Northern "loop" which already existed and was proving beneficial to the economics of these parishes. A rival route to Boston could bring a change in economic fortune.

The Ambergate Railway would have opposed on the grounds that it may have overcome its financial problems which would enable it to complete the line authorized by its Act of 1846.

The 2nd. District Drainage Commissioners' opposition would have been based on the possible damage to the drainage which could result from the earthworks and other constructions which would have accompanied the building of the line across this part of the Fens.

The Black Sluice opposition was not confined to drainage problems but included alternative transport facilities. The South 40 Foot Drain extends east from Boston, past the village of Swineshead, and the proposed line was intended to come from Sleaford to Swineshead and then run alongside this Drain (on the eastern side) into Boston, between the Drain and a road which lay parallel to it.¹ The road was turnpiked, with a tollgate at Hubbert's Bridge and the owners

¹ Today this is the A.1121.

of the tolls of this road were the Black Sluice Commissioners. The loss of revenue to this road which would result from the introduction of the railway was, along with the possible detrimental effects to the South 40 Foot Drain by embankment works, the probable basis of their petition.¹

d) The Bill before Parliament.

The examination of the Bill before the Select Committee of the House of Commons began on June 2nd, 1855, at which time these four petitions were heard against it. In the examination of this Bill information is revealed about the trading position of Sleaford as a whole.

The general situation in the town was that merchants and traders were finding it both difficult and expensive to get their produce to the consuming markets in the manufacturing districts compared with, for example, Boston, then being served by a railway. The same applied to Lincoln, Newark and Grantham. The prices which could be obtained in Sleaford were such that it was frequently an economic proposition for the farmers, etc. to take their produce direct to these other towns, despite the inconvenience involved. Most of the corn was grown on the north, south and west sides of Sleaford and it was being taken more and more frequently by wagon to Newark and Grantham and coal being brought back on the return journey. In this way the Navigation was being avoided. As the Rt. Hon. R.A. Christopher stated in evidence, the market in Sleaford was so depressed for want of "railway accommodation" that his tenants were obliged to go to either Lincoln or Newark. The essential direction of movement for agricultural goods was westwards, towards the Midlands, very little of it went to Boston, and in this the Navigation did not serve the district in the best possible manner as all the exports of grain as well as the bulk of

¹ "Brief to the Promoters", British Transport Historical Archives, RAIL 1066/306.

the imports came from the west and the Navigation ran east, thereby causing a slow and circuitous route having to be taken. This involved the movement of a considerable amount of grain, representing about half that produced in the area.

The price at which corn bought in the Sleaford market sold in the industrial towns was high. About 2/- a quarter was added to the price to pay for carriage. When Newark traders sent their boats to Lincoln to meet the barges from Sleaford bringing up the corn they added the extra then. When the question was put,

"Was it necessary to allow for increased cost of conveyance?" the answer was,

"Yes, and to save their horses,"¹

In consequence of this loss of trade arising from being 13 miles from the nearest railway station, the population of Sleaford was declining - people were moving out and property values falling.

The main part of the questioning related to the coal trade. The argument for a railway for the transportation of coal was very convincing as a line on the proposed route would put Sleaford within 54 miles of the Derbyshire pits. Allowing a toll of 1d. a ton for carriage, it should be received in Sleaford for 12/6d. a ton which, with the coalmerchants' profit of 1/- a ton, would produce a saving of between 3/6d. and 4/6d. a ton.

Perhaps the clearest idea of the saving which could be made on coal comes from the evidence of William Foster, the Navigation Clerk and Thomas Wise, a Boston banker and shipowner. By barge, Foster gave the cost of a ton of coal coming from Boston to Sleaford,

1 Evidence of Charles Chaplin, June 2nd. 1853. In this statement he is probably referring to wagon horses, not towing horses as the Witham embankments were very high and, and far as is known, horses were never used along that Navigation.

including tolls and freightage, as 7/1d. Wise said that, by rail, freightage would amount to 1/6d., thereby making a saving of 5/7d. on a ton.

Shades of the 1827 rail road appeared when mention was made of Ancaster Stone. One witness, Thomas Parry¹ was enthusiastic about the limestone there, saying that it would be used much more widely than it was if rail transport was available. He saw a great need for it in those eastern counties without a resistant building-stone - Norfolk, Suffolk and Cambridgeshire. He had even made a study of the competitiveness in London, using rail carriage, and he had arrived at a delivery price of 1/5d. a foot. His keenness to praise the virtues of the stone must have appeared to be less than impartial when he had to reveal that he was a lessee of one of the quarries and so it would have been to his financial advantage to have access to a railway.

The arguments of the supporters of the railway prevailed and the Royal Assent was given to the Act on August 20th, 1853.

e) The construction and opening of the railway.

Construction was slow. The company found itself short of money and a single track was only laid at first. There also seems to have been a suggestion to curtail the route,

"A meeting of coal proprietors of the Midland district representing coalfields in Nottingham and Derbyshire to consider the propriety of sending the railway on to Boston, instead of terminating at Sleaford² as at present proposed, ..."³

1 A general merchant, builder and flour-miller.

2 Author's emphasis. This point does not seem to have been noticed before in any railway histories.

3 "Illustrated London News", vol.29. no.809., p.3. July 5th.1856.

This proposal was considered at the half-yearly meeting of the railway company, held at Euston, but a decision had already been made to cause notices of purchase to be put on the landowners in the area of the extension between Sleaford and Boston. No difficulty was anticipated in obtaining this land.¹

With the line approaching Sleaford, Monday, June 15th. 1857. was the date set for the opening of the line to Grantham and the railway was then known locally by the truncated route-title, the "Sleaford and Grantham Railway." The inauguration of the line by the directors was to be on the preceding Saturday, the 13th. and this was treated by the inhabitants of Sleaford as a holiday. Full descriptions of this day can be found in the periodicals of the time.²

The importance with which the arrival of the railway was viewed cannot be denied and the euphoria which one senses prevailed that day is reminiscent of that day, almost exactly 65 years earlier, when the town celebrated the Royal Assent to the Navigation Act.

Work had been proceeding quite quickly on finishing the remainder of the line and, on April 12th. 1859, it was opened to Boston, so completing the link between Grantham and that port via Sleaford. The populace along the whole line again celebrated although another carnival-type day did not occur in Sleaford.³ Beginning at Grantham, the train carried the directors, etc,

1 "Illustrated London News", vol.29, no.818., p.216. August 30th.1856

British Transport Historical Archives, PER 34/29.

2 e.g. "Illustrated London News", vol.30, no.863., pp.578-581,

June 13th.1857, and vol.30, no.864, p.603, June 20th.1857.

PER. 34/30.

3 "Illustrated London News", vol.34, no.939., p.371. April 16th.1859.

PER. 34/34.

THE ROUTE OF THE "BOSTON, SLEAFORD & MIDLAND COUNTIES RAILWAY."
(from W.Green's, "Excursionist's Guide to Nottingham, Grantham,
Sleaford, Boston & the German Ocean." Boston.1860.)

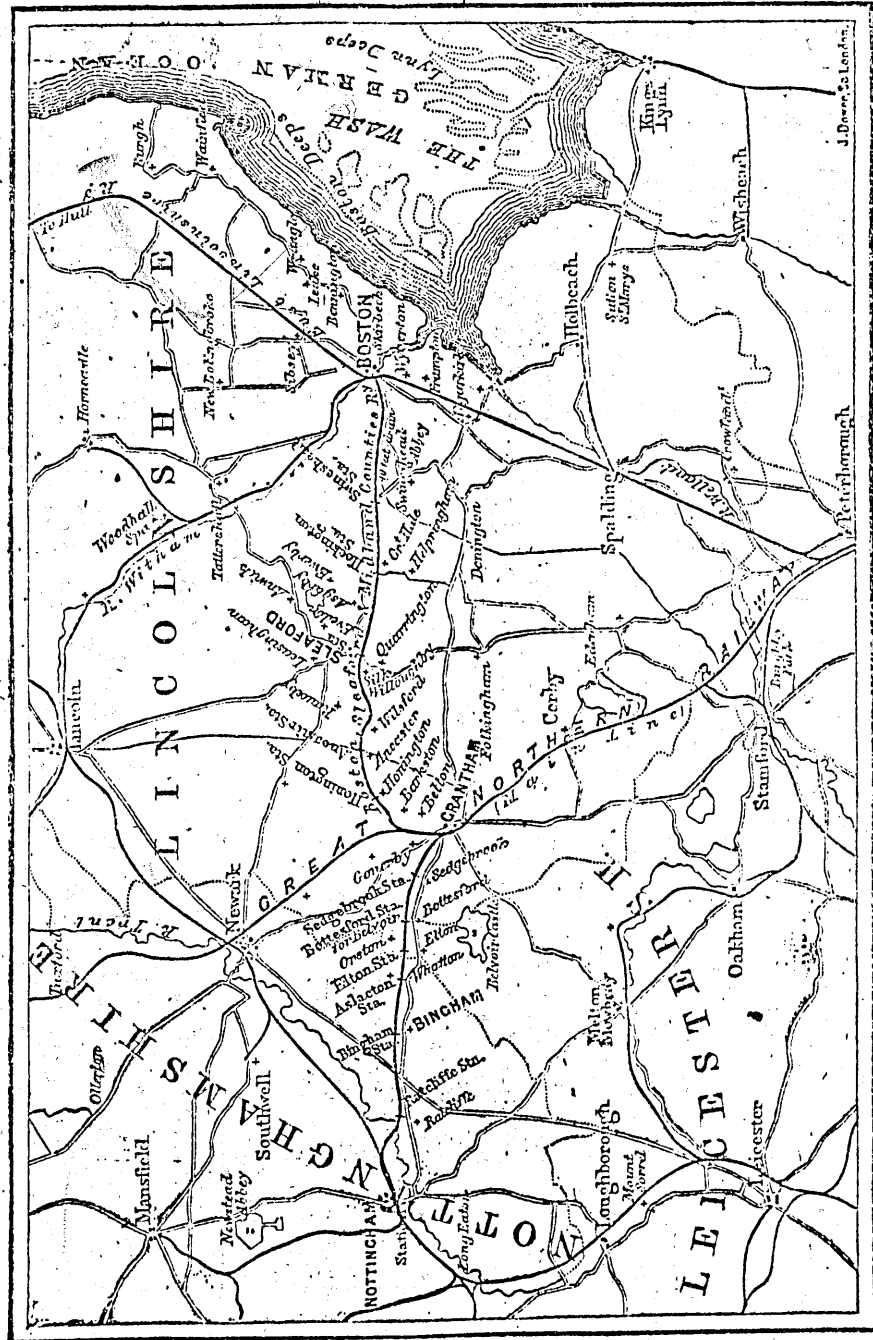


Fig.23

"Accompanied by an amateur band of music, it proceeded at a moderate pace to Sleaford, amid the enthusiastic cheers of the population that lined the route throughout. The houses and buildings in the neighbourhood were tastefully decorated with flags, banners and garlands and the whole country around presented an appearance of great animation.¹

The party then proceeded to Boston where similar scenes were recorded as occurred in Sleaford two years earlier, although the enthusiasm was not so great as that Borough already had a rail link with the Great Northern main line.

Shareholders in both the railway and the Navigation.

As has been seen, the Navigation supported the coming of this railway and individual Navigation proprietors purchased railway shares. Yet, even after this, these same people bought other Navigation shares as they became available. Why was this?

The idea would seem to have been to keep the Navigation as viable a competitor as possible to the railway. The fear that a monopolistic situation could develop where the railway company would purchase any Navigation shares which came up for sale and, eventually, achieve a controlling position which would allow the Navigation to be easily abandoned was present in the minds of many local businessmen. Once this happened the railway's rates and charges would have no check and they would rise without the worry of any loss of traffic to an alternative means of transport. This was even then happening on the Witham, a river on which the "Great Northern Railway Act" (clause 81) had given the railway company a 999-year lease. While the proprietors of the Navigation welcomed the railway they feared a similar monopolistic position. Accordingly, as shares

¹ Ibid.

become available they were bought by some of the Navigation's proprietors to prevent this eventuality taking place.¹ Even those proprietors who had allowed their names to be printed in the railway's prospectus as being in favour of it did this between the time the Act was passed and the railway being completed to Boston.

Railway supporters who bought shares in the Navigation between the passing of the Act (August 20th, 1853) and the railway opening at Boston (April 12th, 1859).

<u>Name</u>	<u>Date of purchase</u>	<u>Share no.</u>	<u>Amount paid.</u>
Thomas Parry.	1.5.1854	104	£100
Charles Kirk	1.5.1854	105	£100
Benjamin Snow	21.12.1854	95/97	£115 each
William Burcham	12.4.1858	1	£ 40

Note the high price which could still be obtained in late 1854 (£115) even though the railway had been a fact for over eighteen months. This would support the possibility that at least until the

¹ In at least two cases this is actually stated,

- i) "Minutes of the Proceedings taken before the Select Committee of the House of Lords on the Sleaford Navigation (Abandonment) Bill, March, 11th, 1878. Question 166. HLRO.
- ii) A report in the "Lincoln, Rutland and Stamford Mercury" for September 28th, 1877, p.4., of a letter issued to the shareholders by the Navigation Committee,

"... and any shares offered were taken up by parties for that purpose. Should the Navigation be abandoned the public will be in the hands of the Great Northern Railway Company, who no doubt would then advance their rates to this place and the neighbourhood, as little confidence can be placed in a company whose system is to charge more money where they have no competition."

middle of 1856 there was a suggestion that the railway would terminate at Sleaford rather than Boston. If this were to have happened the Navigation would have been an essential part of an integrated transport system, but only looking eastwards, so although traffic would have been lost to the railway some would have remained for transport by water.

Even after the railway had opened at Boston the purchase of Navigation shares continued by railway supporters.

<u>Name</u>	<u>Date of purchase</u>	<u>Share no.</u>	<u>Amount paid</u>
Anthony Willoon	30.9.1859	49/50	£40 each
John Warwick ¹	7.1.1860	47/48	£40.10.0d. each

PART NINE

DECLINE AND CLOSURE, 1858-1878.

Finances, to 1858.

At the Annual General Meeting of May 5th, 1857, the Treasurer reported the largest balance-in-hand which the company had ever achieved while, at the same time, he delivered a double blow to future prospects. The minutes put it very clearly,

"It was reported to this meeting that the portion of the Boston, Sleaford and Midland Junction¹ Railway between the main line of the Great Northern Railway ... and Sleaford will be open for public traffic on the 15th. of June next, which it is expected will prove injurious to the company in case the present rate of toll shall be insisted upon, and several owners of vessels trading upon the river having expressed their intention of taking off their boats unless a reduction was made in the tolls ... Ordered ... reducing the tolls to one uniform rate of 1/- per ton upon all goods passing upon ... the Navigation ... It being understood that upon such reduction ... the proprietors of trades' vessels would compete with the railway competition."²

So, not only was their railway competition to take trade away but also the demand for a lower toll rate with only the verbal guarantee that this would be sufficient to keep the boatowners and masters from transferring their custom to the railway.

For some while the carriers had been expressing their concern that the Navigation rates were too high³ but with the Navigation in an

1 This should be, "Counties".

2 Sleaford Navigation Committee minutes, May 5th, 1857.

3 The witness, Thomas Farry, before the House of Commons Select Committee on the "Boston, Sleaford and Midland Counties Railway Bill" had said, "Very expensive, There is a charge of 2/- a ton ... such as to enable the proprietors to make a dividend of 8%."

almost monopolistic position - there being some road carriage - there was nothing they could do about it. Now here was their opportunity to have them reduced for, in their opinion, the Navigation was operating in the very way in which the Navigation proprietors were afraid the railway would do without the Navigation to keep a check on its charges.

The company had no alternative. A notice was prepared for publication in the local paper that the toll rate would be reduced as from June 15th.

The railway could do nothing but take traffic from the Navigation although the company accounts do not show an immediate fall in toll receipts after the opening. This was due to the fact that although June 15th. was the day selected for the opening of the line for regular traffic, this was for passengers only. The transportation of goods did not commence until September 1st, and that of Ancaster line-stone until December.¹

The arrival of the railway in Sleaford had an adverse effect on the Navigation but it was not as bad as it might have been right away for two reasons. First, the accounts up to May, 1858 would only represent a six-month period of freight competition and, second, then only in one direction, that is, westwards. While most of the goods carried by the Navigation came either from or went to the west, some made its way to Boston and Lincoln and this traffic did not come under the competition of the new line just then, but it soon would as the line was, even then, being extended onwards from Sleaford to Boston.

At the first half-yearly meeting of the railway company the directors had stated that most of the traffic which had been carried had been

¹ The receipts of the line up to December 31st, 1857 were £2,417. See "Sleaford Gazette", March 6th, 1858 and "Illustrated London News," vol. 32, no. 905, p. 243. British Transport Historical Archives, PER 34/32.

Fig.24

THE ORIGINAL DRAFT OF THE REDUCTION OF TOLLS NOTICE.

Steyford Navigation.
Reduction of Tolls.

Notice is hereby given that the Tolls Rates and Duties heretofore levied upon all Goods Wares and Merchandise carried upon this Navigation (except Manures and Materials used for the Repair of Roads) will be Reduced upon and after Monday the 15th day of June instant to one uniform rate of One shilling per Ton without regard to the distance which any Boat or Vessel may be conveyed thereon and that the Tolls Rates and Duties levied upon the Transport of Manures and Road Materials will remain as heretofore.

By Order of the Committee, W^m Foster, Clerk

Steyford
June 9 1857

In the Stamped Manuscript of
12th June 1857.

local¹ and this statement is verified in the Navigation records.

At the Annual General Meeting immediately following the opening (that of 1858) a dividend of 6% was declared, whereas 8% had been the norm for the previous 14 years. No direct statement as to the reason for this fall appears in the Navigation records but the local newspaper's report makes it clear what had happened,

"In previous years there had been a dividend of 8% paid to the shareholders but since the opening of the railway from Grantham to Sleaford the traffic has passed from water to rail and the Navigation receipts have been consequently lessened."²

After so short a time, from September to May, the transfer of goods traffic had been so great as to make this immediate dividend difference. Just under £1,000 was taken in tolls and a balance of £880 was declared to the shareholders at this 1858 meeting. To this was added £55, the sum paid by Robert Parker for one year's lease of the wharf.³ At first this was probably a speculative lease, perhaps the hope was there that the railway would bring in by water from Boston some of the building materials it required for the new section being built, then to be taken out to the work site. How profitable this did prove to Parker is unknown but any speculative leasing would have only lasted one year for the completed line was ready for opening in April, 1859. Parker was an omnibus proprietor⁴ and he may have found the space

1 "Sleaford Gazette", March 6th, 1858.

2 "Sleaford Gazette", May 6th, 1858.

3 In "Return from all Inland Navigation etc." a revenue-received figure for 1858 is £1,057, consisting of £981 in tolls, £55 in wharf rent and £21 in sundry receipts.

4 A John Parker, coach builder, had his works in Carre Street in the 1840's. Robert was probably a son who had taken-over and expanded the business into the operations side.

available on the wharf yard suitable for use in this occupation. He continued to lease the wharf and warehouse, probably on an annual basis, until 1867.

The confidence of the railway in taking the Navigation's trade was reflected in the railway Chairman's¹ statements at the next half-yearly meeting. Up to the end of June, 1856, the gross earnings of the line had been £3,392, which allowed for a dividend of 2/6d. to be declared. Greater returns were expected but the company had,

"...shared the fate of most of the railways of the country in respect of traffic during the past half-year." He considered the returns to be very favourable considering the short time that the line had been open and that, as

"He was satisfied that they would not be subject to competition..."

the proprietors would ultimately secure a fair interest on the capital which they had subscribed.

After that it did not take long for the full effects of the railway's competition to be felt. Where toll-takings of over £200 a month had been averaged during the harvest of 1856, during that of 1857 they had averaged about £55 a month and, by that of 1858, they were down to £45 a month.

Economies and further financial decline.

This fall in receipts necessitated action by the Navigation Committee but all they had in their power to do was to reduce expenditure. This was achieved by combining the posts of surveyor and Collector and, in October, 1858, Anthony Stennett, the then Collector, assumed this new role - his father, William, stepping-down from the surveyor's duties.

¹ Henry Ingram, M.P. for Boston and co-founder/proprietor of the

"Illustrated London News."

An annual salary of £60 was agreed upon.¹ The Treasurer's salary was also reduced from £15 to £10 and the Clerk received £20, which was to include all expenses. The Committee also considered terminating the salary of the keeper at Anwick Lock, the occupation of his house rent-free being considered sufficient remuneration for his services. This proposal was later reviewed and dropped, probably on account of the responsibilities which the Navigation had regarding water supply. This lock-keeper had responsibility for operating the staunch at the lock which helped to control the supply of water to the tunnels along the banks. Both the Bottom Lock staunch and that at Anwick were needed in this respect and the Committee may have thought, after William Thompson the lock keeper had complained about the treatment he was to receive, that it would be less costly to pay him a salary than to pay damages for any actions he might take in retaliation against the Navigation by mis-control of the water supply to the river and the tunnels. He was allowed 4 guineas a year salary, 2d. in the 1st on all tolls collected by him at Anwick and his house rent-free.

In 1859 the company felt it needed to give a dividend if possible. While shares were being purchased by local people as they became available in order to prevent the railway from becoming too powerful and who probably had little thought of financial remuneration from the Navigation in the way of dividends, the Committee considered it their duty to make these payments whenever possible. Accordingly, from the sale of £200-worth of the Consols purchased some years earlier a dividend of 4% was available that May.

A further £200-worth of Consols were sold in 1860 to help finance a 2¹/₂% dividend declared that May, at which time it was seen that the

¹ C.f. his previous salary of £52 a year + 10% of all takings in tolls over £1,500.

railway had made great inroads into the water-borne traffic as toll-receipts averaged only £28 a month for the year ending March, 1860. The relationship between the railway employees and the boatmasters may not have been of the friendliest for,

"Some of them tried to continue their water trade in defiance of the railway company who ... dumped loads of clay into the Slea to prevent the boats from using it."¹

The View of the Navigation that summer revealed necessary repairs, yet expenses had to be kept to a minimum. Still they totalled £78 but even this reasonably low figure was not good enough and the two basic economic trends of the company's finances were moving in the wrong directions - outgoings, in the form of repair costs, etc. were not declining as quickly as were the receipts. The only regular income was from the toll receipts, rent from the wharf yard, interest on Consols and 1 guinea a year from the Trustees of the Sleaford District of the Lincoln Road (Peterborough to Lincoln) for the use of the Navigation warehouse as a stone-store.

The £28 a month average of the toll receipts fell to £21 by March, 1861 and a balance as low as £91 in the May of that year was, therefore, not surprising. What is strange is that despite such a low balance a dividend was still declared and paid. While being only a modest 12/-⁵ it amounted in total to over £95, the excess sum being supplied, one would think, by the Treasurer.

As would be expected, with declining balances share prices fell and, with railway competition so strong, they tumbled. A £100 share sold for £90 even in 1858 - by 1860 a £125 share attracted less than half

¹ "Sleaford Standard", November 15th, 1947. The source for this reference is given in the article as, "according to Lord Winchelsea's reminiscences." This author has been unable to trace these.

that amount - £40, and the figure reached only £10 for both types by 1862/3.

Proposals for the closure of the Navigation.

The minimising of expenditure on the upkeep of the watercourse in order to save dwindling capital resources soon had serious consequences for, in October, 1861, the Clerk received a letter from a Mr. Rainforth of Lincoln, a boatowner, complaining about the state of the river.¹ A Richard Whitworth gained the contract for cleaning out certain parts complained of, for which he charged £115. Here again rising maintenance costs and falling toll receipts appeared for, up to March, 1862, only £227 had been collected, or £19 a month on average. With bills totalling £167 the financial state as presented to the 1862 Annual General Meeting was indeed disheartening. After all expenses had been met there was a balance of only £22. It is of little wonder that the following resolution was made at that meeting,

"Proposed by W. Gilbert, seconded by Mr. Burbridge and resolved that in consequence of the unfavourable state of the accounts it be a direction to the Committee to inform the Proprietors at the next annual meeting that it may be necessary at that meeting to consider the expediency of winding-up the affairs of the company."

¹ In Navigation records, Rainforth is mentioned as, "of Leicester" but in the record of the Select Committee of the House of Lords on the Sleaford Navigation (Abandonment) Bill he is, "of Lincoln". In this (Question 208) it was stated that he made complaints between 8 or 10 times, or 2 or 3 times, according to whose evidence is believed, but as his final complaint was made in about 1870 (in 1878 it was stated, "... he has not worked the Navigation for these five or six years") possibly the greater number is the more accurate. Rainforth did much carrying for Simpson and Co., the oil-seed merchants.

So, there was one year in which to rectify the adverse financial situation.

A start was made on this at once when, at the View held in July, instead of simply ordering work to be undertaken on the structures along the river, an estimate was called for from the surveyor. The estimate for the following year amounted to £90 but even this reduction was not enough to have a significant effect on the funds.

The balance-in-hand in 1863 was £33. There had been no radical alteration in fortunes over the previous twelve months and the proposal was again put,

"... that steps be taken for closing the Navigation and winding-up the affairs of the company."¹

An amendment to this was put by a Committee member, Maurice Peter Moore and seconded by Tamberlain Cubley, that the consideration of the question be again deferred to the next meeting. This was supported by a vote of 59 for and 10 against.

Further economies.

At the same time, further small economies were undertaken in the form of reduced salaries -- to £10 a year for the Clerk and £5 a year for the Treasurer. However, the Navigation was not the only sufferer from the reduction in trade and Robert Parker, lessee of the wharf, applied to the Committee, and received, a reduction in his rent from £55 a year to £45.² In addition, the remuneration to William Thompson at Anwick Lock was again considered and, this time, the decision then made to discontinue his salary was adhered to, it being considered that free accommodation and poundage on tolls taken by him was sufficient. The keeper at Haverholme Lock was to be treated differently as he was allowed a salary of 2 guineas a year but he probably did

1 Sleaford Navigation Annual General Meeting minutes, May 5th. 1863.

2 Sleaford Navigation Committee minutes, May 5th. 1863.

not receive a free house and he was not allowed poundage.

William Thompson did not make a great deal of money from the poundage as it was based on the tolls he actually collected - he would receive nothing for passing those vessels which had paid at different points along the river. His collection would have come from boats travelling between Anwick and either Sleaford or South Kyme, that is, a limited section of the internal traffic of the Navigation. For a few years up to the time of the decision to stop his salary in 1863 this traffic had been,

<u>To March;</u>	<u>Anwick Collection</u>	<u>Allowed to Thompson</u> (at 2d. in the 1/-)
1860	£ 3.19. 0d.	13.2d.
1861	£15. 0.10d.	£2.10.1½d. ¹
1862	£ 2.18. 0d.	9.8d.
1863	£ 1.15. 0d.	5.10d.

An attempt to close the Navigation in the
Witham Drainage Bill of 1865.

When the Annual General Meeting of 1864 was held the decision to consider the closing of the Navigation was not again put to the vote. The most obvious reason for this, as there had been no improvement in the funds,² was that an alternative method of relieving themselves of the responsibility of the failing company had presented itself to the proprietors.

The opportunity which had presented itself concerned some proposed works on the Witham which were intended to improve the state of that river. By the end of January, 1865, the "Witham Drainage Bill" was

¹ This high figure is difficult to explain. The period 1859-61 was one of poor harvests, so the money was unlikely to have come from increased cargoes of grain.

² Balance-in-hand as at May, 1864 was £54.

ready for presentation to Parliament and both a Committee meeting and a special general meeting of the Sleaford proprietors were held on January 30th. to consider it.

According to the provisions of the Bill, powers were to be obtained to deepen the lower part of Kyme Eau between the Bottom Lock and the Witham and for altering and deepening the Bottom Lock itself.

"The Committee, as far as it represents the interests of the Proprietors of the Sleaford Navigation adverting to the present circumstances of the Navigation to the expenses of maintaining and keeping in repair the present locks and other works and to the liabilities to which proprietors may be exposed in continuing the Navigation: having regard also to the foundation in late years of the Boston, Sleaford and Midland Counties Railway and the greater facilities there are for communication thereby afforded, and of opinion that a favourable opportunity presents itself for terminating the duties and responsibilities of the Proprietors of this Navigation ..."¹

This was to be attempted by introducing new clauses into the Bill which would discontinue the Navigation and which, by the removal of the locks, etc. would put the river back to its original drainage purpose. All this would then be placed under the control of the Witham Drainage Commissioners who would then have the responsibility for the river but would also have the advantage of full control over the river's water. To help the Navigation convert the river back to its former state the Commissioners would pass over a sum, to be agreed, obtained from the funds allowed to be raised under the powers of the proposed

¹ The full statement is to be found in both the Sleaford Navigation Annual General Meeting and Committee minutes for January 30th. 1865.

Act.

The Clerk reported back to another special general meeting on February 22nd. He had submitted the case for the opinion of a Mr. Reilley, a member of the Parliamentary Bar who had said that it would be impossible to put the new proposals into the pending Witham Bill under the existing circumstances and that the company would not be able to satisfactorily wind-up its affairs without a Bill of its own for that purpose.

Mr. Reilley had made the helpful suggestion, though, that amendments could be made to the Bill for the purpose of suspending the further outlay of money on the Navigation until the proprietors had determined which course of action to adopt. This suggestion met with the proprietors' approval and clauses of this nature were proposed. Unfortunately, what these clauses were is not now known but they were sent to the House of Lords in the form of a petition.

Between the time of the approval of these clauses on February 22nd, and the next Committee meeting, held five days later, there seems to have been a change of heart as to what to do. In some way a reversion to the earlier proposal to return the river to its pre-Navigation state must have been considered and the outcome of these considerations resolved the minds of the Committee at last.

"The Clerk reported that in carrying out the Resolutions passed at a General Meeting of the Proprietors on the 22nd instant, he had made enquiries as to the state of Kyme Eau prior to the passing of the Navigation Act and the result of such enquiries, and in consequence of the information obtained, it was considered and decided that it would not be expedient for the Navigation Company to assume the responsibility of lowering Chapel Hill Lock and deepening the Witham from thence to the River Witham and the Clerk was accordingly instructed not to proceed further with the clauses proposed to be inserted in the

Witham Bill.¹

What seems to have happened is that the Witham Drainage Commissioners agreed to assume the responsibilities asked of them by the Navigation in exchange for the works mentioned above. These were probably too expensive for the Navigation to afford. So, the Witham Drainage Bill of 1865 passes into law, without the closure clauses for the Navigation in it.

Another reason not to proceed may have been a stabilisation in the trading position. The late summer of 1865 had been favourable for cereal crops - June was wet, which swelled the grain and, from July, the harvest time was hot and dry. This had lowered the water level in the Navigation and the toll receipts had reflected this;

<u>Month</u>	<u>Amount taken in tolls</u>
June	£14
July	£ 5
August	£ 3

However, the large crop which resulted would have necessitated the use of the Navigation as well as the railway to remove the crop from the district. While the balance-in-hand in 1864 had been only just over £54, this had risen to £108 by May, 1865 and to £164 by May, 1866. This was considered good enough to make a dividend payment of 10/-%.

The wharf lease.

The wharf lease became renewable in 1867 and the advertisement for it attracted three tenders for the premises. A Joseph Gibson and the former lessee, Robert Parker, each tendered £40 a year for a 7-year term while an Edward Allen offered £42 a year for the same period.

¹ Sleaford Navigation Committee minutes, February 27th, 1865. This attempt to close the Navigation had cost £41. Accounts for May 1st, 1868.

Not only was Edward Allen (a grocer) the highest bidder but he was also a Navigation shareholder. The agreement he signed was not that for which he had bid - he was to take the wharf for 5 years, from June 25th 1867, at an annual rent of £45 and he was to be allowed £10 out of the first half-year's rent to allow for any repairs and for the payment of rates and taxes. The Committee would seem to have been quite generous to Allen and this is in contrast to their decisions regarding expenditure of only the previous month, when they reduced Anthony Stonnett's salary to £40 a year.¹

Allen's lease was signed by a new Chairman, John Taylor Warston, a local brewer, who had succeeded Colonel Anthony Willson ("Peacock" before 1851) upon his death in 1865. He was the first Chairman of the company whose election to that office was noted in the minutes and he would only have become eligible for that post after 1863 when he purchased his first shares.

Toll receipts. 1867-9.

It is not possible to determine the amount taken in tolls during this period as no figures appear in the accounts between April, 1867 and April, 1868. A similar omission occurs between July and October, 1868. An examination of the total toll receipts for the year ending March, 1869 reveals that no tolls were taken at all during those times. If this was brought about by a failure simply to record the amounts it was not thought serious enough to merit mention in the company records and a similar attitude must have prevailed if the lack of a toll receipt was due to work being carried out on the waterway which necessitated closure.

A figure of £157 was returned in toll-takings for the year up to March 31st, 1869 and the Annual General Meeting was able to show a balance of £172. A dividend of 10/-¹ was paid.

¹ Sleaford Navigation Committee minutes, May 7th, 1867.

The state of the Navigation, 1869-71

Throughout 1869 one of the Committee's main concerns was again the state of the waterway and the need for clearing the weeds and dredging. During the times when it was in good condition the passage of boats carrying upwards of 45 tons was possible,¹ but about this time, Rainforth, the boat owner, (see p.275) complained again about the state of the river and especially about the mud and sandpans which constantly built-up below Haverholme and Anwick Locks where the Ruskington Beck and the Old River Slea, respectively, join the Navigation. With a horse-drawn barge it was usual to need only one horse but Rainforth's boats had to use two when the mud and weeds were allowed to accumulate. Also, the maximum load he claimed he was able to carry was 20 tons. He argued further that his tow-ropes were constantly breaking due to the strains being placed on them.² One of Rainforth's men claimed that it had once taken three days to come from the Bottom Lock to Sleaford because the mud was so bad.³

Further work at the bottom end of the Navigation in connection with the Witham improvements closed the river in 1870. Between May 23rd. and February 21st.1871, only £4 was taken in tolls and this would represent, and also give an indication of, the amount of internal traffic using the Navigation then.

Share sales, 1872-5.

A series of share sales occurred throughout 1872, occasioned most likely by the two previous years' poor balances. 1871's Annual General

1 Evidence before the House of Lords Select Committee on the "Sleaford Navigation (Abandonment) Bill", March, 1878.

Question no.213. HLRO.

2 Ibid. Questions 270 - 272.

3 Ibid. Question 293.

Meeting had shown a balance of about £33, while that of 1872 stood at only a few shillings over £12. In the view of many people it must have seemed obvious that a company coming regularly so near to the point of making an annual loss, and with no foreseeable means to remedy the situation, would soon have to close.

All the shares coming onto the market in 1872 - actually 11 in total - originated from two sources, 8 were in the possession of the wife and children of Benjamin Snow, with William Hungerford Holdich (the then Treasurer) also a beneficiary. The other 3 belonged to Eleanor and Charles Smith, who had received them through the survivor of the former joint-owners, which had included William Forbes, once company Clerk. In the case of the Snow portfolio one may postulate that Henry Snow, being a Committee member and realising the position the company was in, suggested to the rest of the Snow family that a sale would be advisable before all value was lost and the shares became worthless. It must be emphasised, though, that there is no evidence for this whatever.

In the main the purchasers were those who had already demonstrated their commitment to the Navigation. Anthony Stennett bought 4 and another Committee member, Rowland William Payne, had the same number. The price paid varied from £10 to £12.10.0d., for both £100 and £125 shares, although this made hardly any difference as there was little likelihood of a dividend being paid in the near future.

The share vendors had been correct in their assumptions about the finances as a loss was declared in 1873. While the toll revenues amounted to £133, by the end of March, 1873 the balance-in-hand was a deficit of £124. This sum was covered by a personal loan from the Treasurer who was probably reimbursed by the £64.3.6d.-worth of Consols which were then sold.

The news of the poor showing spread out of the county as far as Leicestershire for only a few days before the Annual General Meeting, Edward Henshaw Cheney of Gaddesby Hall, sold out his share-holding

of 6 shares to Thomas Parry, again a Committee member, for £10 each.

Rowland William Payne sold out his share-holding to Edward Allen, the wharf lessee, just before the Annual General Meeting of 1874. Allen had recently renewed his lease and so he had a great interest in seeing the Navigation continue but the price he paid, just £5 each, shows how much loss of confidence there had been in the two years since Payne had paid nearly £11 each for them. Payne was financially correct to sell when he did as another deficit balance was declared in May, 1874. Once again the Treasurer covered the amount, £83, but confidence was draining away very quickly now. That August one share came onto the market and was bought by the local bank manager, Henry Ingoldby, for £1. Share prices were never again to rise above that figure.

The decision to abandon the Navigation.

1877 was to be the final year of operation of the Navigation and two conflicting views are available as to the trade carried on during that year. In the testimony¹ of Henry Peake, the company Clerk, he said that the figures for that year were:

Sleaford to the Witham = 46 tons.

Witham to Sleaford = 215 tons 15 cwt.

This meant that, according to him, an average of only 5/- a week was earned in tolls. Yet, if the company accounts are analysed, £131 was taken along the whole course of the river, to which needs to be added the Anwick collection, which would have amounted to only a few pounds. These two views are irreconcilable. This being the case, when

¹ Evidence before the Select Committee of the House of Lords on the

"Sleaford Navigation (Abandonment) Bill", March, 1878,

Questions no. 43-52. Peake was probably talking about a monthly figure and confusing it with an annual one. That he must be wrong can be seen in the company accounts for the year 1877-8, where toll receipts total £131.

Peake also stated that only 19 boats made use of the Navigation, of which 4 represented the traffic to Simpson's Mill, he must again be incorrect.

Whatever it was that Peake was commenting upon, it did not alter the fact that at the Annual General Meeting of 1877 the Committee and proprietors as a body realised that it was futile to try to compete with the railway any longer. The question of the desirability of closing the Navigation was again raised and it was referred to the Committee for consideration at their annual view to be held on June 15th. and they were allowed powers to convene a special general meeting if they should so decide. While the report of the view does not mention the Committee's decision they must have agreed that their only course of action was abandonment.

The first formal steps in the abandonment was the presentation of the petition to Parliament for an Act to close and this was sealed at the Committee meeting held in the company office on the wharf on December 15th, 1877.

The Standing Order for such an Act was laid on the table of the House of Commons on January 21st, 1878¹ and the same occurred in the Lords ten days later.²

The provisions of the Abandonment Bill.

On January 26th, 1878 the special general meeting was held, seven proprietors attended, representing themselves and holding proxies, in total amounting to £4,850 of the share capital of £15,075. At this meeting the Bill for the Act was presented. It consisted of 16 sections.³

1 House of Commons Journal, vol.153, p.18. HLRO

2 House of Lords Journal, vol.110, p.25. HLRO

3 "A Bill to provide for the closing of the Undertaking of the Company of Proprietors of the Navigation from Sleaford Castle Causeway to the River Witham in the County of Lincoln and for the Dissolution of the Company; and for other purposes". 41 & 42 Vict. Copy in this author's possession.

After the short title and interpretation, Clause 3 stated that the closing date was to be December 1st, 1878. The other clauses were, briefly,

Clause 4: The company had the right to sell the buildings, etc.

Clause 5: The method by which company-owned land should be sold.

Clause 6: The receipt of 3 directors of the company (meaning Committee members) should be given in respect of land, buildings, etc. sold under the powers of the Act.

Clause 7: The company had to pay compensation for bridges and other works created under the provisions of the original Sleaford Navigation Act of 1792, for the convenience of landowners and which would have to be maintained after the closure.

Clause 8: All disputes concerning claims upon the navigation to be settled by arbitration.

Clause 9: This arbitration to be conducted in accordance with the provisions of the "Railway Clauses Consolidation Act, 1845."

Clause 10: The company had to leave open the existing channels leading to and from the locks at each mill and substitute either a pair of draw doors or sluices in place of the upper gates and remove the lower gates entirely.

Clause 11: All public roads, bridges and culverts, for which the company was liable, should be put into good repair when the Abandonment Act was passed, after which the company would cease to have liability for them.

Clause 12: After December 1st, 1878, the company would exist only for winding-up its affairs. Assets would be collected and distributed - first to pay the costs of obtaining the Act, second, to pay all debts, liabilities and compensations and, finally, any money remaining would go to the shareholders in the form of a final dividend.

Clause 13: Within 3 months of the passing of the Abandonment Act, the company would advertise in the "London Gazette" and a local newspaper for the submission of all claims upon it.

Clause 14: Receipts to be given by trustees, executors, guardians, etc. for all monies released to them by the company.

Clause 15: Any money left outstanding in share dividend claims after a period of 18 months from the passing of the Abandonment Act should be paid to the credit of the Paymaster General on behalf of the Chancery Division of the High Court, who would then become responsible for making the necessary payments.

Clause 16: All costs of the Act to be paid for by the company.

The adoption of this Bill was proposed at the meeting by Edward Allen and seconded by Thomas Parry.

The only query which arose regarding the Bill was raised at a Committee meeting held the same day and related to Clause 10. They decided to refer this to the Chairman and Thomas Parry, who was a builder, and both were to confer with Stennett, the surveyor, and instruct the Clerk: if it was decided that any modification to it was necessary.¹

On February 1st, the First Reading of the Bill was heard in the House of Lords² and the Committee to hear evidence on it was named on the 26th.³ Lord Mounteagle was to be Chairman.

Certain parties presented petitions against the abandonment -- the Witham General Drainage Commissioners, the Witham 2nd. District Drainage Commissioners, the Black Sluice Commissioners, Thomas Simpson

¹ This clause was later changed, see p. 295.

² House of Lords Journal, vol.110. p.28.

³ Ibid. p.61. See "Proceedings of the Select Committee of the House of Lords on the Sleaford Navigation (Abandonment) Bill," March, 1878.

and Co., the Marquess of Bristol and the Hon. Murray Edward Gordon Finch Hatton. Counsel appeared only for the petitions presented by the 2nd. District Commissioners and Thomas Simpson and Co. The Hon. Gordon Finch Hatton examined in person.

Evidence before the Select Committee of the House of Lords.

The evidence taken before the Select Committee commenced on Tuesday, March 12th. The Navigation had engaged two counsel on its behalf, a Mr. Pember and a Mr. Batten and they began the day's proceedings by examining Henry Peake. From the start there are a number of fundamental errors in the answers he is reported as giving and one wonders how accurate other parts of the evidence is in light of this - whether due to a lack of knowledge on the part of Peake or inaccurate note-taking by the Committee's shorthand writers, e.g.

"(Question) 6. How many shareholders have you at present? -

49, I think."

There would have been 49 if share no.80, supposedly belonging to Erasmus Darwin jar. had still been included in the share capital of the company.

When mentioning this share capital the question was put,

"8. I have here 130 shares at £100 and 23 at £125, is that correct? - Yes, that is correct."

That is certainly not correct as there were 135 shares at £100 of which 100 has a nominal share value of £125, less share no.80, which was at £125, so producing a total share capital of £15,875, a figure which is given as "£5,875" in Question 9.

One final example of this evidence's inaccuracy is shown in the following question and answer,

"25. I ask you whether the line from Grantham and Sleaford ... was opened on the 16th. June, 1856? - Yes, that would be the date."

No it would not, but June 13th. or 15th. 1857 would.

Most of Henry Peake's evidence was concerned with the financial position of the company and the monetary reasons which were forcing closure. He also mentioned some details of the company's accounts for the ten years up to 1877. He stated that the gross income over that period had been £2,231, while total expenditure had been £2,373, so producing an annual deficit of about £14. This deficit had been met by the sale of some Consols but the remaining £535-odd of these (a sum which included the interest which had accrued to them) were the only assets which the company possessed excepting real property which, he estimated, amounted to about £1,800.

After a consideration of the amount of traffic which had used the waterway over the previous year, Mr. Batton turned to the subject of finding someone to lend the money needed to allow the Navigation to continued to operate and loaned on the security of the tolls. Peake's reply was to the point,

"77. ... - Not unless we find a lunatic."¹

He further considered that it would be impossible to find any new shareholders who would take new £100-shares simply for the sake of keeping the Navigation open in order to put,

"(58) ... a thorn in the side of the Great Northern Company," and that there were no other means whereby money could be found to meet any future deficiencies which may arise.

Mr. Vaughan Richards then rose to cross-examine. He was the counsel engaged by Simpson and Co. He began by trying to establish that, by availing themselves of the powers granted in the original Sleaford Act, then those clauses became compulsory thereafter on the company.

¹ An original "Lunatic", a member of the "Lunar Society", Dr. Erasmus Darwin, had invested £500 in Sleaford shares in 1792. Another was not to be found now.

This idea was not resolved in the examination of Peake but the intention was to argue that the Navigation could not be given up as there was a legal responsibility on it to fulfil the functions laid down in the original Act. He further implied that these functions had not all been complied with, particularly that of keeping the channel clear, so as to render the Navigation useless.

"... That is not the fact", retorted Peake.

He was next examined by Mr. Pembroke Stephens, who appeared for the 2nd. District Commissioners. He was very concerned about the financial liability of the company and the position in which those bodies would find themselves upon whom the Navigation wished to devolve their responsibilities, particularly the 2nd. District.

A consideration of the Bottom Lock was then made and especially of the staunch located there. Mr. Stephens argued that this staunch was a work in substitution for work authorised to be put in by the adjoining drainage districts under the Witham Act of 1762 and was necessary for the functioning of the Navigation. Also, the original Gleaford Act (clauses 16 and 17) had stated that the care of the Bottom Lock should be with the 2nd. District and North and South Kyme Commissioners and that one of the Navigation's intentions by an Abandonment Act was to revert the Glea/Kyme Eau back to the state it was prior to 1792. If this was the case, why should the 2nd. District be expected, as they were by the Abandonment Bill, to meet the expenses, with other bodies, of the maintenance of this staunch? Peake's answer was that the company would like to leave the river in the best state to serve the interests of the country. Mr. Stephens jumped at this opening.

"135. You are not simply going out and leaving it as you found it but ... you are taking it into your head to make any arrangement you like for the general good of the country?"

Peake replied that the clause in the Bill referring to the Bottom Lock and staunch,

"155 ... was prepared to meet the views as we expected of the Petitioners",

but would be glad to come to any arrangement which would suit all parties.

The Hon. Gordon Finch Hatton then cross-examined on his own behalf. He wished to ascertain upon whom the maintenance of the bank on the south side of the river between Anwick Lock and Kyme Ferry Bridge would fall. He was probably worried in case he would become liable as he was the owner of the Haverholme Estate which adjoined it and the liability for the banks was, according to the Bill, to be passed to the riparian owners. The only comfort he received from Peake was that he thought that the Haverholme Estate owner had the primary responsibility but that may have been removed by the 1762 Witham Act.

Henry Peake stood down and John Taylor Marston, the Navigation Chairman was then sworn. Mr. Batten first took him through the reasons for keeping up the Navigation in opposition to the railway and the circumstances which had brought the company to Westminster. Marston said that,

"168 ... we thought it better to come here before it [the funds] were all gone, so that we might leave the matter in a responsible way rather than otherwise."

After two brief questions about railway charges from Mr. Vaughan Richards and two in re-examination by Mr. Pember, he was allowed to withdraw.

It may seem strange that so few questions were directed at him but most of the relevant information had already be obtained from Peake, who had been a company official for a longer time than Marston and, as Clerk and a solicitor, might be expected to know more of the implications of the proposed Bill's clauses than Marston.

Next, Anthony Stennett, the surveyor was called. His evidence mainly consisted of explaining what works were under his charge and answering questions about the repairs to them which he had undertaken. His evidence concluded the case for the promoters of the Bill.

The petition of the firm of Thomas Simpson and Co. was then examined and Thomas Simpson himself was called. Although he was one of the firm's directors he had sold the business in 1876 to William Goldie, the former manager. Simpson stated that the selection of the land for the site of his works had been influenced by the fact that it was on the side of the Navigation and that if there had been no waterway he would not have chosen that location. However, he had given up using the Navigation regularly in recent years due to the problems which he claimed existed from silting and also due to price fluctuations in the commodity on which his business was based.

"261 ... in times of fluctuation of the value of linseed in Hull it was to my advantage to have small parcels at once conveyed quickly by rail; but, when markets were steady, I invariably used the canal."

William Goldie was the next witness and he argued that he had bought the firm knowing that Simpson had not used the Navigation but he would not have contemplated the purchase if he had thought that the waterway was in a permanently bad state. He said that the Navigation was essential to him but he had not used it since he had taken over the business for a number of reasons,

- a) Being new to the business and never having bought linseed before he made small purchases which were more conveniently carried by rail rather than by water.
- b) As only Russian seed was crushed, the market was very unsettled due to the "Russian War" [the Russo-Turkish War, 24.4.1877 - 3.3.1878] and for that reason purchases were small.

c) The two previous winters had been mild and less oil cake had been purchased by farmers in consequence.

He expressed the firm's intention to build a fleet of barges to carry the seed in future years as the trade developed. When pressed for actual figures, Goldie summarised as follows:

The mills output in 1877 = 1,600 tons.

At 50 tons a barge = about 30 barges = about 3 a month.

The Navigation tolls = 1/- a ton = 1,600/- = £80 a year.

Allowing for the estimated doubling of trade after 1878 =

£160 a year in tolls.

With the expenses of management and the "interest to be paid on the £15,875 capital", meaning possible dividends, Mr. Fenber put the question,

"368. Do you think ... it is a fair thing that one gentleman should ask that this navigation should be kept open for traffic of that sort?"

He received the reply,

"We only asked what we thought we were entitled to, carriage by water; we do not enter further into the question."

That evidence just about concluded the day's proceedings but Mr. Fenber gave some details of the original capital formation of the Navigation¹ and Mr. Pembroke Stephens addressed that Committee on

¹ This was completely inaccurate although it was supplied by Fenke.

The main points were:

a) "£13,000 was fully paid-up" - substantially correct.

b) "... amounts up to £25 "were advanced, "... making in all £15,875".

100x£100 shares were advanced to £125 to give a total of £15,900.

Share 135 (£100) was not purchased until 1801. £15,875 is only

obtained when Share 60 is removed from the share capital.

c) "On Dec. 28th. 1793, £2,000 was borrowed on mortgage" - this is a double counting of the first part of b).

d) "On September 6th. 1794, £1,200 more was borrowed" - almost certainly not. See p. 130.

behalf of the 2nd. District Commissioners but his statement was not recorded.

The adjournment was then made until 11 o'clock the following morning.

Things then moved quickly. When the examination resumed the next day (Wednesday, March 13th.) the Chairman stated that his Committee had found the preamble of the Bill proven and then asked whether any agreements had been reached on the matter of the Bottom Lock.

Mr. Pember replied that the parties had met but to no avail.

A clause to be inserted in the Bill was proposed by Mr. Vaughan Richards for giving compensation to Simpson and Co. for being deprived of the use of the Navigation but this was rejected by the Committee.

The staunch at the Bottom Lock proved the most difficult problem that morning and the Committee directed that all the parties withdraw while they came to a decision about it.

After a short while they were recalled and were addressed by Lord Mounteagle. He told them that the Committee could see no exact way to reconcile all the parties but it had been suggested that there should be a conditional trust created to take effect if the riparian owners would select trustees to take charge of the lock. If they could not do this then the Committee would take a clause proposed by Mr. Pember binding the company to put the Bottom Lock and staunch into good repair out of their assets. The Lords in Committee expressed their wish that the Witham Drainage Commissioners might take charge of the Bottom Lock.

At the end of the day's proceedings, Mr. Pember informed the Committee that a clause had been prepared which, he believed, would be satisfactory to the parties. The agreement was that the company would put the Bottom Lock into good repair and it should then be vested in the Witham Drainage Commissioners but the expenses of the care and maintenance of it should be reimbursed by the riparian owners on the river above the lock in the proportion in which it should be

used by those owners. If at anytime the Drainage Commissioners could not obtain this payment from the riparian owners, or if they considered it prudent, they were empowered to discontinue the use of the lock by removing the gates or filling-in the lock pit.

The final agreement to the Bill came the following morning when it was read through for a third and last time and Lord Mounteagle was directed to report the Bill, as amended, to the House of Commons.¹

Alterations to the Bill.

Apart from the alterations to the Bill brought about by the provisions made for the Bottom Lock, there were some other slight differences, one of which resulted from a petition presented to the Committee. This was for the protection of Haverholme Priory (clause 11) and the owner, the Hon. Gordon Finch Hatton. The Navigation passed through 5 miles of the estate and contained Anwick, Haverholme and the Paper Mill Locks. Each of these was to be put into good repair by the Navigation after which they were to become the property of, and be maintained by, the estate owner. He was given power to substitute draw doors or sluices for the upper gates and to remove the lower gates, or even fill-in the lock-pit altogether. Further, the owner was allowed to use the towing-path on the north side of the river between Haverholme and Anwick Locks and he was liable for its repair and that of the bank at that point, provided the owner and his tenants could use the Navigation free-of-charge between those two locks as long as the waterway remained open.

Another clause added to the Bill (clause 10) was that the company had to fill-in the locks at Cogglesford, Byers and the Carr Mills.

A final addition concerned the cleaning of Kyme Eau and the repair and maintenance of the banks (clause 15). The responsibility for

¹ House of Lords Journal, vol. 110, p. 88.

these functions devolved on those persons or parties who, but for the passing of the original Sleaford Navigation Act, would have been liable. In the main this meant the Witham General Drainage Commissioners.

The Bill was passed by the House of Lords and sent to the Commons on March 27th.¹ where it received its First Reading on the 29th.² and Second on May 10th.³ Six weeks later, on June 17th., and almost 85 years to the day of the company's formation, the Royal Assent was given to the "Sleaford Navigation (Abandonment) Act."⁴

Winding-up

On December 1st. the Navigation officially ceased to exist and all that remained was to wind-up the affairs. The Committee met on the 16th. and decided that the wharf and other premises in Sleaford should be put up for sale by auction. This was performed by Messrs. Elston Law and Son at the Bristol Arms in Sleaford on February 11th. 1879.⁵ The Navigation Office on the wharf had previously been taken over by the Nettam family and in that building, on October 17th. 1878, Sarah Elizabeth Nettam had been born.⁶

As far as other property was concerned, that at Anwick Lock was to be offered first to the Bristol Estate for £150 and if it was not

1 House of Lords Journal, vol.110, p.106. HLRO.

2 House of Commons Journal, vol.133, p.151. HLRO.

3 Ibid. p.211.

4 Ibid. p.290. The Act was, 41 Vict. cap.83.

5 "Lincoln., Rutland and Stamford Mercury" for February 7th. 1879. Sold for £180 to a Mr. Wells, maltster, on behalf of Mrs. Sharpe of the "Cross Keys Inn".

6 As evidenced by her birth certificate. She continued to live here for the rest of her life as a tenant of Messrs. Hubbard & Phillips, seed merchants, who bought the premises and the rest of the wharf area in the 1890's.

Fig. 25

Anthony Stennett's estimates to comply with the Abandonment Act.

Sheaford Navigation	
20 November 1878	
Estimated Expense of Repairs to Locks, Bridges &c	
3 Locks put filling up for Road across & fencing	45 " 0 " 0
Paper-Mill Bridge repairing	10 " 0 " 0
Papermill, Haverholm, and Hurwick Locks Brickwork repairing	20 " 0 " 0
Haverholm Bridge repairing	30 " 0 " 0
Pyne Bottom Bridge repairing	20 " 0 " 0
Stanch at Pyne Lock Brickwork repairing	8 " 0 " 0
Carpenter's Work, repairing Lock close Hurwick Stanch &c	35 " 0 " 0
Decidging in Hurwick Pond, & below Hurwick Lock	60 " 0 " 0
	<u>£ 228 " 0 " 0</u>

wanted, then it should be offered to the Hon. Gordon Finch Hatton at the same price. Property at the Bottom Lock, such as the house, was to be first offered to a Mr. Fatchel for 200 guineas and, if refused, to a Mr. Cust for the same sum. The same Mr. Cust had also agreed to lease the rights over Navigation land at South Kyme and the company seal was affixed to the deed poll that day.

By May, 1879, at least Gogglesford Lock had not been filled-in and Anthony Stennett was given instructions to proceed with that task. On August 21st, Messrs. Creasey and Wildgoose of Sleaford held an auction of the heavy equipment - lock doors, swing bridges and pile-driving equipment.¹

So, the company's affairs were brought to a conclusion one by one but it still took almost 4 years from the passing of the Act for this to be completed. Finally, on May 14th, 1881, the last meeting was held. The accounts showed a balance, after all calls on the realised assets had been met, of £365 and this was distributed in a final dividend of £2.6.0d.² to all proprietors on handing over their original share certificates and all transfers.

Then, the Sleaford Navigation passed into history with these words,

"In recording the final winding-up of the company this day the proprietors desire to express their thanks to the Committee of management and more especially to Mr. Marston, the Chairman, for their valuable services in obtaining the Act for the dissolution of the Company and for winding-up the affairs of the Company."²

¹ "Lincoln, Rutland and Stamford Mercury" for August 8th. & 15th. 1879.

² Sleaford Navigation Annual General Meeting Minutes, May 14th. 1881.

PART III

CONCLUSION, AND THE SLEAFORD NAVIGATION SOCIETY.

After the closure of the Navigation the Slea/Kyme Eau reverted quickly to its drainage function and, with the filling-in of the lock pits and the removal of gates as authorised by the Abandonment Act, Sleaford became cut-off from the inland waterway network of the country. Only the Bottom Lock remained operative which, under the control of the Witham Drainage Commissioners, allowed access to about 8 miles of the river as far up as Anwick Lock.

Throughout the last two decades of the 19th. century there were a number of legal disputes concerning the rights of ownership over Kyme Eau banks (see Appendix R) but these had been resolved by the commencement of the new century. From that time water traffic was negligible as South Kyme was the only population centre still connected with the Witham. From here the sugar beet harvests found their way to the refineries at Bardney, near Lincoln, and Spalding.

By the early 1940's this trade had declined to such an extent that it was felt that the upkeep of the Bottom Lock was unnecessary and the gates were taken out and sluices substituted. This meant that only the lowest one and a half miles of Kyme Eau were still connected with the Witham but as there were no settlements along or near this section it was rarely used.

By the 1960's the use of Britain's inland waterways as pleasure and recreation facilities was increasing. The Norfolk Broads became an established tourist area, as did the canals of the Midlands. Boaters from the Trent would, and still do, pass along the Fosdike into Brayford Pool and then down the Witham to Boston's Grand Sluice. Unless an ocean-going craft was possessed the only course then was either to return to the Trent or pass through the lock at Anton's Gowt into the Witham Navigable Drains, which have a very fluctuating water level and so are an uncertain navigation. However, on their way back to the Trent vessels pass the mouth of Kyme Eau without their owners giving it a second glance, mainly due to the forbidding flood-gates

which close off the river at Chapel Hill. These can be pushed open and access is then possible up to the Bottom Lock (avoiding the eel nets of local anglers which can foul propellers).

That was the situation up to one Saturday morning in the summer of 1977. For some years the wharf yard at Sleaford had been for sale after the owners, Messrs. Hubbard and Phillips, corn and seed merchants, had passed into liquidation. On the wharf still stands the Navigation Office, a Department of the Environment Grade 2 listed building. The canal historian, Charles Hadfield, and his wife were spending the weekend with this author and, on arriving at the wharf, it was seen that "Sold" notices had been erected. Upon enquiry it was ascertained that it had been sold to a property company and that redevelopment of the site was a distinct possibility. Charles Hadfield suggested that a meeting be called locally to attempt to secure the future of the Navigation Office. The following week this author talked with some local waterways enthusiasts and a meeting of 20 or so people was held in a private house in Sleaford. At that meeting it was decided that as well as pressing for the preservation of the Office, which is a unique type of structure in waterway architecture, an attempt should be made to form a society to reopen the former Navigation to boats, in particular to the tourist and holidaymaker.

The first public meeting of the "Sleaford Navigation Society" was held on September 23rd, 1977 at the Methodist Hall, Northgate, Sleaford and the aims of the Society were explained to the group of about 50 which attended. These aims are -

- 1) To study the water situation of the river. Much underground water is being removed by bore-holes for farming activities. This results in dry sections and stagnation in the river. The production of a constantly-flowing river with sufficient depth for boats to navigate is needed.

- ii) To examine and maintain the state of the footpaths along the river. Besides boaters, walkers should be able to make use of the 12-mile former towpath. This is in reasonably good condition in most places at the moment and the Society will aim to keep it so and clear it where necessary.
- iii) To examine and, perhaps, improve the state of the river buildings including Navigation Wharf and Office.
- iv) To examine the possibilities of eventual restoration of all or part of the Navigation by securing the water supply and restoring all or some of the seven locks.

At the time of writing (December, 1978) the situation is -

a) Navigation Office. The Society is in contact with the purchaser and he is sympathetic with the Society's views. He has offered a new site and foundations and the Office to the Society, if the Society will move it. There are many objections to removal but it is anticipated that a satisfactory conclusion will be reached.

b) Restoration. Negotiations have recently begun between the Society, the Anglian Water Authority (Lines River Division) who own the Bottom Lock, and the Lincolnshire County Council, concerning the restoration of the Bottom Lock chamber and gates. With this restored vessels could once again come to within about 4 miles of Sleaford. It is confidently expected that this will be open to traffic within the next two years.

Membership is approaching 100 and consists of people living locally to as far away as South Africa. The inspiration behind the idea for a Society, Charles Hadfield, kindly agreed to become its Honorary President.

We all believe that this Sleaford Navigation will be the first of the "lost" Lincolnshire waterways to be "rediscovered".

APPENDIX ABRIEF DETAILS OF THE OTHER WORKS OF THE ENGINEERS INVOLVED IN THE VARIOUS SURVEYS AND THE BUILDING OF THE SLEAFORD NAVIGATION.1. JAMES GREASY.

There were, apparently, three distinct phases to his career when he lived in different parts of the country. The location given for him in each group heading is either where he was known to have been living at the time or is stated in the report signed by him.

a) James Greasy of Boston.

- 1765-1775 : Acts as a free-lance surveyor to the Witham General Drainage Commissioners, viz:-
- July & Sept, 1765 : "James Greasy of Boston to make surveys".
- Oct. 1765 : Reference to his survey of Timberland (survey made in 1766 - ANDR4, Lincoln Archives)
- " : To make surveys in the 2nd. Witham Drainage District.
- Sept. 1767 : Survey of Holland Fen.
- Feb. 1768 : To measure the brickwork in the Grand Sluice, Boston.
- July. 1768 : With James Hoggard, to measure the quantity of excavations in the New Cut, from the Grand Sluice to Chapel Hill - fee=1 guinea a day.
- Nov. 1773 : His plan of the Sleaford Navigation published.
- Mar. 1774 : His survey (almost certainly with William Jessop) of the Sleaford Navigation published.
- July. 1774 : He attends the Witham Commissioners with reports, levels, plans, etc. made by him and William Jessop for making a canal from Sleaford to the Witham.
- 1766-1768 : Acts as a free-lance surveyor to the Black Sluice Drainage (BIDE 1, Lincoln Archives)
- Oct. 1766 : Belivers a survey of the Finchbeck area.

- Mar.1768 : With John Chapman, to measure the brickwork in the
Black Sluice, Boston.
- 1777 : Report and opinion respecting the drainage of the
Middle and South Levels of the Fens.
- 1784 : The Norfolk Court of Sewers asked for plans, etc. for
a new sluice at Knight's Gort on the Ouse. In the
event William Jessop did the job.
- 1791 : Report on the drainage of Spalding (TFR iv/3/26-30.
Lincoln Archives).

b) James Greassy of Clerkenwell, Middlesex.

- 1793 : Survey for the drainage of the salt marshes in the
parishes of Spalding, Moulton, Whaplode, Halbeck and
Gedney.

c) James Greassy of Crawley, Sussex.

- 1800 : Report on the drainage of Deeping Fen (2BHL/2/23, Linc. Arch)
- 1800-1 : Agreed with Jessop's report on the Leven Canal.
- 1801 : Report on the Keyingham Drainage, S. Holderness.
- c.1802 : Appointed engineer on the Sussex Ouse.
- 1802 : Report on the Lambwath Stream, Holderness.
- 1806 : Surveyed upper reaches on the River Adur, Sussex.

See also, 2BHL/2/24 (Lincoln Archives) for an account (written about
Dec.1800) of his career to that date.

He died about 1807 - see "Sussex Industrial History", Winter, 1970-1,
p.29 and Winter, 1973-4, p.11.

Sources: Witham Drainage Commissioners' Minutes, 1762-1775 and
additional information kindly supplied by Prof. A.W. Skempton,
Dept. of Civil Engineering, Imperial College, London.

2. JOHN DYSON.

The John Dyson employed as contractor for the locks was probably the engineer of that name who came from Newington, near Bawtry. He had worked with William Jessop before 1782, for example, on the building of the Gainsborough Bridge and Road (House of Lords Committee Proceedings, March 16th, 1787) and with John Hudson (Timberland Drainage, 1784). He was resident engineer, under Jessop, on the Everton, Gringley and Histerton Drainage, 1796-1801, and was presumably the, "J. Dyson" who produced a plan of this area in 1787.

In 1792 he surveyed the Sleaford to Tattershall Thorpe Turnpike (with John Langwith jnr.) and prepared the estimate for the same. He became surveyor to the Horncastle Navigation in 1794.

In passing, it is interesting to note that John Dyson the younger (a son or a nephew) was one of the principal contractors on the City Canal, 1830-05 and also worked on the West India Docks construction in the same period - both large Jessop projects.

Additional sources: Prof. A.W. Skempton and E.C. Hadfield.

3 EDWARD HARE.

- 1769 : Became engineer to the Black Sluice Drainage, having done some surveying for them from 1766.
- 1772-1802 : Appointed Commissioner for various drainage districts (see Wheeler's, "Drainage of the Fens of South Lincolnshire". Boston, 1898.)
- 1792 : Surveyor to the works contracted for by William Bonner on the Sleaford Navigation.
- 1793 : Trustee to the Sleaford to Tattershall Thorpe Turnpike.
- 1799 : A report with Jarvis and Golding (see, "Copies of Reports of Engineers made to the Black Sluice Commissioners". Boston, 1877)

- 1800 : Report with Jessop, Maxwell and Rennie on Deeping Fen and the Witham Outfall (SSS Misc. Drainage Papers (strongroom) 2 copies, also Smith 5, Langkott and Easton Misc. Papers, Lincoln Archives)
- 1801 : Commissioner for Deeping Fen.
- 1816 : Died on April 3rd. ("Dictionary of Land Surveyors", ed. P. Eden, Dawson, 1976.

From 1772 there are references to him as being, "of Gaster" (just outside Peterborough but every Sleaford reference describes him as being, "of Gosherton". An Edward Hare was Surveyor of Highways for the parish of Swineshead, located between Gosherton and Boston, during the 1790's. (Swineshead Vestry Minutes).

Additional sources: Prof. A. W. Skempton.

4. JOHN HUDSON.

Much of the detail of John Hudson's life is, as yet, unknown. He began his career as a surveyor and then moved into civil engineering. By the 1790's he was recognised from East Yorkshire to the Norfolk Fens as an experienced engineer. He is described as living at Louth, later at Kenwick Thorpe and, finally, at Ashby Thorpe or West Ashby.

- 1769-71 : Various Witham drainage surveys.
- 1775 : Report on the Wainfleet Drainage.
- 1784 : With John Dyson, Report on the Timberland Drainage.
- 1788 : Report on Netheringham, Dunston, Hooton, Potterhanworth, Washingborough, Helghington and Branston Drainage (Benjamin Handley was connected with this project in his capacity as an attorney).
- 1792 : With William Jessop, Report on the Sleaford Navigation.
: Report on the Carlton Drainage.
: Report on the Holderness Drainage and advised on the proposals for the Level Canal.

- : Report on the Eau Brink Cut (not one of the principal engineers)
 - : With William Bonner, Report relative to the Intended Navigation from Lincoln to Horncastle.
 - 1792-3 : Report on the Witham Outfall (with Colborne and Maxwell).
 - 1793 : Prepared estimates for Hull Docks.
 - 1794 : A Commissioner for the Welland Act.
 - 1795-6 : Prepared plans for Grimsby Haven.
- He died sometime between 1797 and 1802.

Additional source: Prof. A. W. Skempton.

5. WILLIAM JESSOP.

- This engineer was engaged on many projects during his career. This list contains only some of his works in the East Midlands.
- 1774 : With James Creassy, attended the Witham Commissioners with reports, levels, plans, etc, for making a canal from Sleaford to the Witham.
 - 1777 : Report on the Loughborough Navigation.
 - 1783 : Appointed engineer on the Trent Navigation.
 - 1787 : Report on the Ashby-de-la-Zouch Canal.
 - 1788 : Prepared an estimate for the Cromford Canal and continued working thereon.
 - 1790 : With Christopher Staveley, report on the Leicester Nav.
 - 1790-1 : Surveyed the Nottingham Canal.
 - 1791 : Report on the Horncastle Navigation.
 - : Directed the survey on the Nutbrook Canal.
 - : With John Hudson, report on the Sleaford Navigation.
 - 1791-1807 : Employed on various surveys on the Witham Navigation
 - 1792 : Re-surveyed the Derby Canal.

- 1793 : Re-surveyed the Grand Junction Canal.
: Appointed engineer on the Grantham Canal.

6. JOHN VARLEY.

- c.1770 : Assistant to James Brindley.
1772 : Resident engineer on the Chesterfield Canal under
High Henshall.
1777-80 : Engineer on the Erewash Canal.
?1781-2 : Report on the Sleaford Navigation.
1783 : Prepared a new report on the Sleaford Navigation.
1791 : Surveyed the Nutbrook Canal.
1792 : Surveyed the Leicestershire and Northamptonshire
Union Canal.
1793-6 : Engineer on the Leicestershire and Northamptonshire
Union Canal.

APPENDIX B

4) DATES OF THE ENCLOSURES OF THE PARISHES IN THE AREA OF THE SLEAFORD
NAVIGATION IN RELATION TO THE DATES OF THE VARIOUS SURVEYS.

<u>PARISH</u>	<u>ENCLOSURE ACT</u>	<u>SURVEY</u>
Hockington	1764	
Horbling	1764	
Holland Fen	1767 & 1770	
Threackingham	1768	
Helpringham	1773	
Anwick	1774	
Timberland	1774	
Wilsford	1774	
Ruskington	1778James Greassy, 1773/4
Billingham	1779John Varley, 1781/3
North & South Rauceby	1788Jessop & Hudson, 1791
Sleaford & Holdingham	1794	
Osournby	1795	
Swarby	1795	
Scredington	1796	

ii) ALTERNATIVE NAMES FOR THE MILLS AND LOCKS ALONG THE NAVIGATION.

(the top name in each list is the earliest alternative)

a) Conglesford Mill = Almond's Mill

Peck's Mill

Sharpe's Mill & Top Lock

Today called = Conglesford Millb) Dyers Mill = Bone Mill

Sabine's Mill

Lowe's Mill

Today called = Bone Mill (Lock) - mill demolished.c) Corn Mill = Cropper's Flour Mill

Tomlinson's Corn Mill

Today called = Tomlinson's Mill or Wash's Milld) Paper Mill = (John) Cropper's Mill

Wobray's Mill

Leasingham Moor Mill

Today called = Paper Mill (Lock) - mill demolished.e) Old Mill = Doughty's MillToday Called = Mill and Lock both demolished, therefore, no name.f) Haverholme Mill = no alternatives.Today called = Haverholme Mill (Lock) - mill demolished.g) Anwick Lock = 2nd. Lock

Thacker's Lock

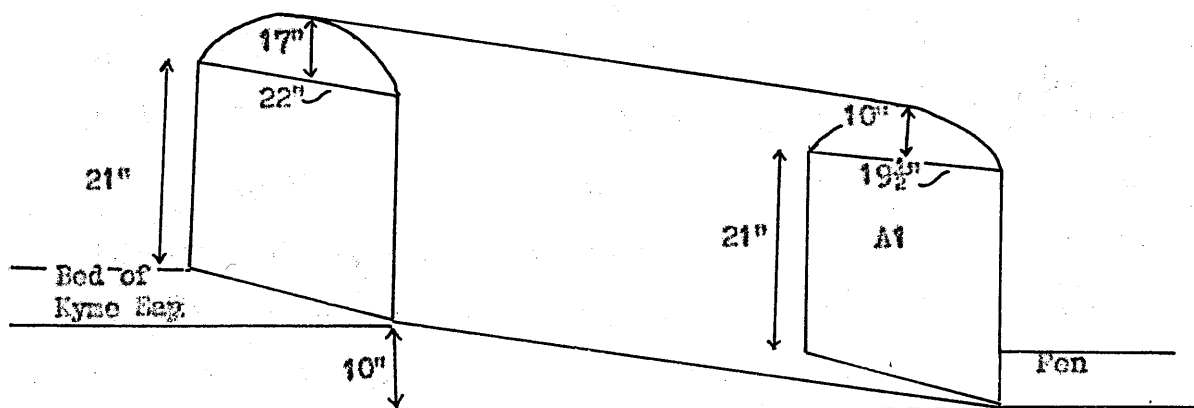
Today called = Cobbler's Lockh) Botton Lock = 1st. Lock

Kyme Lock

Today called = Kyme Lower Lock

APPENDIX CAN ANALYSIS OF THE ARGUMENT REGARDING THE WATER SUPPLY TO HOLLAND
FEN FROM THE EXISTING AND PROPOSED HOLLAND TUNNELS, 1791.1. The existing Holland Tunnel.

According to the landowners this was a 21" square tunnel. This would produce an incharge cross-sectional area of 441 sq.". However, this is incorrect as the dimensions were not exactly 21" square. This figure most likely represented the cross-sectional shape. The tunnel was, in fact, 38" high to the crown of the arch, 22" wide on the river side and 31" high and 19½" wide on the fen side. (see p.56, no.15.) The tunnel was laid at the Bottom of Kyme Eau (as stated in "Argument of counsel in the House of Lords" 308 BS 14/5, see p.87) but, according to the Jessop and Hudson report, it was laid 10" below Kyme Eau. This implies an inclination from the river side to the fen side of 10". The tunnel would have appeared thus -



The discharge cross-sectional area (A1) onto the Fen =

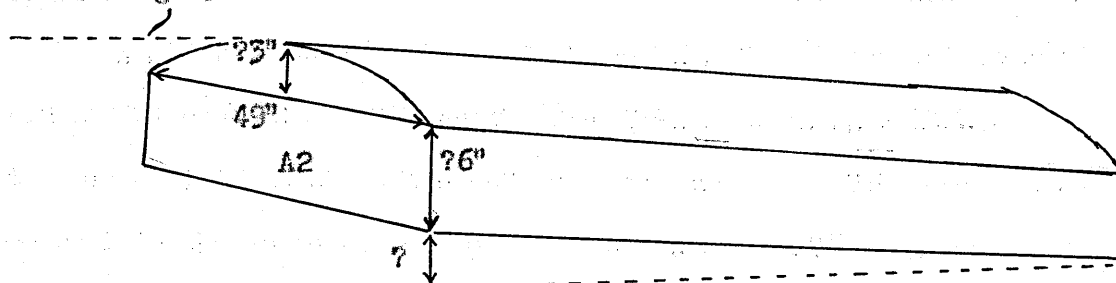
$$58 + 409.5 = 467.5 \text{ sq.}''$$

2. The proposed tunnel.

The dimensions were to be 9" deep and 49" wide. This is all the constructional information which exists. There is no direct information concerning either its length or inclination.

The proposed tunnel would, then, probably have appeared thus -

Maximum possible
river height.

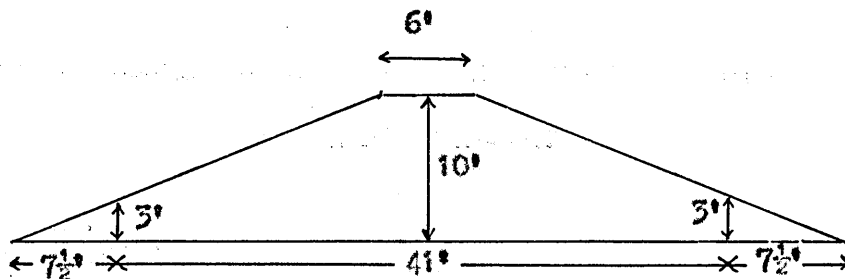


The assumption has to be made that both ends were of the same dimensions, therefore, the discharge cross-sectional area onto the Fen =

$$114 + 294 = 408 \text{ sq.}''$$

3. The possible length of the tunnels.

The tunnel length is nowhere stated in the records but it can be estimated. One piece of evidence is that James Creassy said, before the Select Committee of the House of Lords on the Sleaford Navigation Bill, May. 3rd. 1792. that the bank through which the original tunnel passed was 10' high and 6' wide at the top. Earth becomes stable when banked to slopes greater than $1:2\frac{1}{2}$ and so the possible section through the bank was -



Although the base of the bank would have a width of 56' the tunnel would be shorter than this. Assuming a heading of 3', the tunnel length =

$$56' - 15' = 41'$$

4. The discharge of both tunnels when running full.

When the head of water is above the entrance to the tunnel i.e the tunnel is running full, sluice conditions exist. The discharge of water from the tunnel under sluice conditions is calculated according to the formula -

$$Q = k_2 A \sqrt{2gh_1 - h_2}$$

where,

Q = discharge, in cubic feet per second = "cusecs".

k_2 = a sluice coefficient = 0.6

A = area of the cross-section of the orifice.

g = gravity, in feet per second.

h_1 = upstream head of water, in feet.

h_2 = downstream head of water, in feet = 0 in this case.

Therefore,

The original tunnel, when flowing the full 38" deep, produced -

$$0.6 \times \frac{467.5}{144} \times \sqrt{64.4 \times \frac{38}{12}} = \underline{27.82 \text{ cusecs}} \text{ onto the Pen.}$$

The proposed tunnel, when flowing the full 9" deep, produced -

$$0.6 \times \frac{408}{144} \times \sqrt{64.4 \times \frac{9}{12}} = \underline{11.81 \text{ cusecs}} \text{ onto the Pen}$$

5. The discharges of both tunnels when running less than full.

At no time during the argument did the supporters of the Navigation claim that the proposed tunnel would always produce more water than the original. Their claim throughout was that, as about 10" was the usual depth to which the original Holland Tunnel ran (see also the evidence of James Creassy before the Select Committee of the House of

Lords, on the Sleaford Navigation Bill, May 10th. 1792) the quantity discharged under these conditions was that which the proposed tunnel had to match.

Flowing less than full means that the hydrological conditions prevailing are those of a weir, and the discharge can be calculated according to the formula -

$$Q = k.l \left(\frac{\bar{v}^2}{2g} + h \right)^{\frac{3}{2}}$$

where,

k = weir coefficient = 2.9

l = length of the weir, in feet.

\bar{v} = upstream approach velocity (which in these cases can be assumed to be negligible)

All other symbols as for the sluice formula.

Therefore,

The original tunnel, flowing 10" deep, produced -

$$2.9 \times \frac{19\frac{1}{2}}{12} \times \left(\frac{10}{12} \right)^{\frac{3}{2}} = \underline{3.58 \text{ cusecs}} \text{ onto the Fen.}$$

The proposed tunnel, acting as a weir and taking 7.5" as the mean tunnel height to represent the flow, produced -

$$2.9 \times \frac{49}{12} \times \left(\frac{7.5}{12} \right)^{\frac{3}{2}} = \underline{5.85 \text{ cusecs}} \text{ onto the Fen}$$

If the proposed tunnel had been lain horizontally i.e. not given a fall, the coefficient is the only factor altered. A tunnel which has the river lapping its upstream arch is, hydrologically, in an unstable state, being neither a true weir nor a true sluice. The discharge in this case is -

$$2.7 \times \frac{49}{12} \times \left(\frac{7.5}{12} \right)^{\frac{3}{2}} = \underline{5.45 \text{ cusecs}} \text{ onto the Fen}$$

Conclusions.

From their respective positions the claims of both the landowners and the Navigation supporters were correct. As far as the discharge was concerned, the proposed tunnel would produce approximately 200%

more water when flowing full than the original one did when flowing 10' deep, but would supply less than 50% when the original ran full.

These results have to be treated with some caution as they do not entirely agree with some of the statements made by the engineers of the time e.g. John Hudson said that the new tunnel would produce ten times as much water than the original. However, this could be a figurative statement. The equations used in the above calculations were known in the late 18th. century and Jessop and Hudson would have used them. The results obtained in the above calculations and the assumptions made about the tunnel shapes, etc. are hydrologically accurate and probably represent the closest that can now be achieved in a reconstruction of the tunnels as they then existed.

APPENDIX D

AN ANALYSIS OF THE CURRENT ACCOUNT OF BENJAMIN HANDLEY CONCERNING
PAYMENTS MADE ON BEHALF OF THE SLEAFORD NAVIGATION. (from the records
held by the Manager, Lloyds Bank, Northgate, Sleaford)

The banking firm of "Peacock, Handley and Kirton and Co." of Northgate, Sleaford (also known as the "Sleaford Bank") commenced operations in April, 1792. Just two months later the Sleaford Navigation came into existence with the three banking partners closely connected with its fortunes - Anthony Peacock became its Chairman, Benjamin Handley its Treasurer and William Kirton, a shareholder.

From the beginning there does not appear to have been a separate bank account in the name of the Navigation, its finances being handled through the private current account of Benjamin Handley. Thus, an examination of this account and, more specifically, the debit side, might be useful in any attempt to establish the payments which were made to the contractors building the Navigation and also throw some light onto this aspect of canal history.

All the details of the account are from Ledger No. 1. The day-to-day payments are to be found as follows:

Debit side.

16. 4.1792 - 10.11.1792 = Folio 15.	2. 1.1794 - 8. 3.1794 = Folio 266
10.11.1792 - 15. 3.1793 = Folio 132.	10. 3.1794 - 7. 5.1794 = Folio 283
16. 3.1793 - 27. 4.1793 = Folio 183.	10. 5.1794 - 28. 6.1794 = Folio 286
27. 4.1793 - 24. 6.1793 = Folio 188.	28. 6.1794 - 28. 8.1794 = Folio 303
28. 6.1793 - 24. 8.1793 = Folio 217.	30. 8.1794 - 24.11.1794 = Folio 315
24. 8.1793 - 12.10.1793 = Folio 223.	26.11.1794 - 11. 2.1795 = Folio 323
15.10.1793 - 23.11.1793 = Folio 234.	14. 2.1795 - 16. 5.1795 = Folio 345
23.11.1793 - 31.12.1793 = Folio 243.	16. 5.1795 - 11. 6.1795 = Folio 369

The debit entries themselves can be categorised into a number of types, some more specific than others and, for this reason the results obtained have to be regarded as tentative.

First, there are the entries which are definitely payments made on behalf of the Navigation and can be identified as such as the word "Navigation" or an abbreviation e.g. "Navg." appears beside them, viz:

"To cash, per E. Haltby (on Nav. a/c)".

Second are the payments which were made to known contractors employed on the Navigation and which were paid out during the period when their work was being undertaken. These payments were made at regular intervals, usually weekly. In this was a succession of weekly payments indicated in the account can be assumed to be for Navigation work rather than amounts paid by Handley on behalf of his private business, even though the word "Navigation" is not found beside that entry.

Third, there are a small group of entries for freighting of lime and stone. Again, the word "Navigation" is not mentioned but it would seem highly likely that these payments were on that account.

The fourth and final group of entries is the most speculative as the description of them in the ledger is, in all cases, for "notes and cash" or, for example, "For cash, per A. Peacock". At first sight they may appear as Handley's private business but, when looked at in relation to the form of the other entries, their significance to Navigation business becomes apparent. The reason for their inclusion is dealt with below.

However, even when all the probably Navigation entries are considered, the total amount paid out comes to less than the £15,500 which was collected in the form of share subscriptions by the time of the Annual General Meeting of 1794.¹ The reason for this deficiency

¹ Shares 131-4 incl. were for a non-cash transaction and share 135 was not purchased until 1801.

probably lies in one of two places, or perhaps both. The most likely is in the ledger itself and, in particular, in those entries from the opening on April 16th, 1792 until the following September 6th, and from then until November 12th. Up to, and past, that date all the debit entries were for cash, notes or drafts and in round figures, e.g. £1,000, £200, £500, etc. There is no indication whether these are private or Navigation transactions. By the time the first balance was shown on September 6th., £8,643 had been paid out. Perhaps more than half of this had been cash withdrawn to pay for the Navigation works which had then been going on for about one month. What is clear, however, is that it is impossible to say how much had been paid to the workmen or suppliers before William Bonners began cutting the Navigation in the second week of August, 1792. The problem is compounded for, by November 12th, when another total appears, a further £6,113 had been debited to the account, so making a total of nearly £15,000 in about 7 months, but it is only four days before that date when the first payment which can be attributed to possible Navigation business can be noted. Payments which one can state with any degree of certainty were for the works do not begin until early in March, 1793.

The account continues past the time the Navigation was opened to traffic on May 6th, 1794 until June 11th, 1795. The individual names continue to be entered up to that date when, abruptly, Navigation business ceases to be entered. The final entry is for the transfer of Navigation interest and dividends and seems to be the disposal of that Navigation money which remained in Handley's account. June 11th, 1795 was the date of the Annual General Meeting (adjourned) and a decision was probably taken at it (although unrecorded in the company minutes) whereby this account was closed and the finances put onto a more formal basis. The decision also appears to have been taken that an overdraft account, separate from Handley's private account, would be opened and all business would pass through that.

This account (ledger no.1, folio 382) began working on June 29th.1795. Handley still seems to have been helping the Navigation finances in a personal way for, on May 3rd.1796 he was allowed, and accepted, 5% interest on the monies lent by him to the company. This is not recorded as a separate entry in Handley's private account as all mention of the Navigation ceased on June 11th. Payments of this interest may appear on the credit side after 1796 but cannot be distinguished from private credit entries as they are not individually marked. Also, from Navigation records it would seem that Handley did not claim this interest.

There is a possibility that the various questions raised by Handley's private account and its handling of Navigation affairs may be explained with the discovery of a possible missing ledger. The evidence for this ledger is found in the entry relating to Benjamin Cheales, the Navigation Clerk. His entry in ledger no.1 is for him in his capacity as Commissioner for Kesteven. This ends with the remark that it is continued in his private account but an examination of the other ledger entries reveals no further Cheales' account. Ledger no.2 is a chronological continuation of ledger no.1 and finishes in 1815/16. There is then a gap in the bank records until the 1880's, by which time the Navigation had been wound-up.

Returning to the overdraft account, until May,1800 there were no credits paid into the bank and debits mounted until they reached £1,428 before the first credit payment was made. The debits were all in the form of cash (except for 233-odd which was transferred from Handley's private account on February 2nd.1797) and were to local merchants and traders, obviously for work they were doing on the Navigation. In July,1799 the overdraft was converted into a loan and interest was charged. The last amount drawn by the Navigation on this account was on May 6th.1800 (an Annual General Meeting day) for £206, payable to John Jagger. This meant that the total amount

borrowed was £1,406 and the bank charged interest at a rate of 5% on this principal. Small amounts were paid in from May 5th.1800 onwards but no start was made on repaying the loan proper until May 7th.1807, when some interest and £206 of the principal was paid. Repayments of interest continued until the principal was paid-off in two sums, one of £600 and another of £601 on May 7th.1810 and May 9th.1811 respectively.

The interest charged up to July 24th.1806 was at 5% but the entries for interest after that date indicate a reduction to 4 $\frac{1}{2}$ % was made, the only time the bank reduced the interest rate to a customer at that period. This was certainly due to the bank partners' connection with the Navigation and their concern over the lack of a dividend since 1796 resulting from the very small annual balances-in-hand, e.g. £5, for May 1805-6, prompted them to make this financial concession.

The individual accounts from Ledger No.1.: April.1792-June.1795.

JOHN JAGGER

John Jagger was appointed surveyor to the works contracted for by John Dyson and Co. on February 22nd.1793, at a weekly wage of 3 guineas. He also made a contract for four bridges on the 18th. of that month at a total contractual cost of £200. The first entry mentioning Jagger by name is for July 29th.1793, which is five months after these events, so a certain number of payments to him must have been made in the earlier ledger entries but which are unidentifiable.

The first two payments noted are one month apart. However, from September 14th.1793 onwards regular weekly payments are made on the Saturday on each week and always for small sums, invariably in guineas. These amounts probably included his weekly salary and this could not have been paid monthly as this would mean that at least 12 guineas would have to appear every four weeks or so and this does not happen. Sums of over this amount do occur but are so irregular

that it makes the idea of a monthly salary payments impossible. There is, though, only one payment for the exact amount of his weekly wage, that on June 30th.1794. All other weekly sums except two (on February 24th.1793 and July 9th.1794) are for sums above 3 guineas and would seem to be payments for additional works undertaken or for materials supplied.

It is impossible to identify those payments made in respect of the bridges contract.

By the time the Navigation opened, £346 had been paid over to him and the ledger shows that he was still receiving money from the company when the account ceased being held by Handley personally in 1795.

WILLIAM BONNER

As with Jagger's account, detailed payments do not begin until 1793. As far as is known Bonner contracted for two works on the Navigation - for widening and deepening Kyme Eau between the Witham and Anwick Lock and for the same type of work from there into Sleaford.

The first contract, for which there is no recorded price, was made on July 31st.1792 and the second, which totalled £2,052 on January 21st.1793. By the time the second contract was made the works were approaching the junction of the Sleaford Mill Stream and Kyme Eau and, at the time of the first definite payment from Handley's account to Bonner, the works had reached the neighbourhood of Boughty's Mill (the Old Mill). Thus, the record of payments made to him, and amounting to £2,473 by the time of the opening of the Navigation, is probably that for the outlay on the second contract.

The payments up to the Annual General Meeting of 1793 are usually for large amounts with £105 (i.e. 100 guineas) appearing six times within the space of two months. Payments are also frequent and rarely is the interval between them greater than a week. The amounts paid

out, especially after May 8th.1793, show no pattern - large and small sums being entered next to each other. Presumably included in these amounts would be payments to the workmen employed by him.

The final payment to him is at the end of November,1793 and so it would seem that the digging was finished about that time. From September,1793 onwards, apart from one entry (October 19th.) the amounts debited are small and would, therefore, indicate,

- i) the works were coming to an end and less material needed to be purchased - the amounts representing "finishing-off" work, and
- ii) as this was the harvest season the number of men labouring on the diggings would be reduced and this would be reflected in the amount of money needed for wages.

JOHN DYSON, JOHN LANGWITH JNR. AND PETER TYLER.

These men constituted the firm of "John Dyson and Co" which obtained its first contract with the Navigation on August 23rd.1792, for erecting the two locks in Kyme Eau. From the start the payments to the individuals seem to have been meant as payments to the firm as a whole (with the exception of one payment to John Langwith).

It is significant with the Dyson and Tyler accounts that no payments were made to them on the same day. This would indicate the payments were to the firm rather than the individual and the credit was made to, perhaps, whichever of the partners happened to be in Sleaford during that week. Regular weekly payments were made to Dyson or Tyler from June 18th. until December 28th.1793, at which time the Navigation suspended all payments to them as their contract price had been reached and they had not finished the work.

Of the three partners only one, John Langwith, was awarded a contract in his own right. This was for two bridges, at £110 each (October 3rd.1792). Only one payment was made to him from Handley's account - that of April 26th.1793, for £250. This would certainly be in payment for the bridges with the possibility of the extra

£30 for additional works done or materials needed.

For the firm of Dyson and Co. the information available as to contract prices for all the works undertaken by them is incomplete. The sums mentioned in their contracts produce a total of £3,519. In addition there were two locks on Kyme Eau to be built and which would, using the price for the locks mentioned on the Mill Stream as a guide, have come to about £530 each, and four bridges. Using the sum contracted for by John Langwith there would have cost about £440. Further, there was a watch house at Anwick to be constructed and this would have cost about the same as the one which this firm built at the Bottom Lock, £53. In round figures, all this, together with whatever the price was for cleaning the river below the Bottom Lock, would have produced a total contract figure of about £5,200.

Although the contracts date from October, 1792, the account does not mention specific recipients until, in this case, April, 1793.

John Dyson was paid from the account mainly in October, November and December, 1793, while Peter Tyler received the cash between the June and October. Payments in August and September, 1793 were made to Tyler exclusively and the same is true for Dyson in November and December. The significant thing about the account is the frequency of the payment of the sum of £105 (100 guineas), a fact already noted in William Bonner's account. The only payment Dyson is reported by name as receiving before the 1793 Annual General Meeting is for this amount and it appears a total of 6 times out of 18 entry items in the year up to the Annual General Meeting of 1794. This is much more noticeably in the payments to Peter Tyler as here £105 appears 13 times out of 15 entries. Coming as it does on a weekly basis, this would seem to be the regular amount paid by the Navigation in the fulfilment of their part of the contracts with Dyson and Co.

By the time the Navigation stopped payments to the firm, £3,141 is noted as being paid to them through Handley's account. This leaves

about £2,000 to be accounted for and some of this may be hidden in the following section.

POSSIBLE PAYMENTS TO DYSON & CO. OR WILLIAM BONNER.

This account does not pay out to these two contractors specifically amounts equal to those contracted for. The difference must, therefore, lie in payments made by Benjamin Handley to these two before their accounts became individually indicated, that is, for Dyson and Co., before April 4th.1793 and for William Bonner, before March 9th.1793.

The only clue as to how some of these initial entries in the Handley account can be accredited lies in the fact that the sum of £105 is found recurring in both contractors' accounts. This is much more noticeable in the Dyson and Co. account than in William Bonner's although, as mentioned in the section above dealing with Bonner, £105 appears six times within the space of two months. As there are 4 x £105 entries noted almost immediately after the Bonner account became individually itemised it might be reasonable to suppose that similar amounts would have been paid before that date. The significance of the £105 entries to the Dyson and Co account has been noted earlier.

All the unitemised £105 debits are made out to "Notes" or "Cash" and, where "Cash" it was paid to Anthony Peacock, the Navigation Chairman. This could mean that during the early construction period the contractors' payments were made to them through him. Alternatively, the later, itemised, debits listed as going to individual contractors could still have been paid to Anthony Peacock for distribution but his handling of the monies being omitted and only the final recipients being noted.

There are occasional entries for £210 (= 2 x £105) which perhaps represents a payment to each contractor on the same day

The problem remaining with this group of payments is, if they were made to either, or both, contractors, which payments went to which contractors? This is impossible to answer as both had begun work on the Navigation and would have been receiving amounts by the time the first of these entries was made on November 8th, 1792.

CANAL WORKERS.

Very little information exists about the men who laboured on the construction of this Navigation. One could hope that their wages would be recorded either as a credit to Anthony Peacock or as a break-down of the regular £105 entries made in favour of the contractors. This is not the case. Only in two instances are the labourers mentioned; once as a group, as "diggers" and once with a payment to an individual, possibly in return for extra work undertaken or as a recompense for an injury received. It is known that up to 400 labourers were working on the Navigation during its construction but only the name of "Goulding" is recorded to remind us of the men who performed the physical work which brought the Navigation into being.

ROWLAND MYERS.

From details given in the Sleaford Navigation minutes, Rowland Myers was working on the construction of the locks and, specifically, in coping the walls. This is the only account which mentions receipt stamps being supplied for any payments shown as, for example, the odd 4s. on £80 on June 5th, 1793.

When the Navigation was opened in May, 1794, the construction works had not been completed and, from these banking details and the minute books, it can be seen that Myers was not paid-off until the following November.

J. CARTWRIGHT

An obscure account as Cartwright's occupation is not known but he was probably a blacksmith and ironmonger. He is shown here to have received small but regular payments over a period of about eighteen months. Perhaps it is significant that he does not seem to have been employed during the winter months of 1793.

W. RYLOT.

Once again, this individual's occupation is unknown but he was employed in a full-time capacity from December 7th, 1793 for about one year. The amounts paid to him were small, with two payments of £40 plus and one of £37 being exceptional.

OTHER PAYMENTS.

In the main these are made to tradesmen and craftsmen of the Sleaford district and to carriers. These amounts are certainly for goods and services rendered during the construction period.

For a summary of all these payments, see the page following.

JESSOP AND HUDSON.

No reference is made in these accounts to any payments to the two consultant engineers. Their fees are most likely included in the un-itemised entries of the later half of 1792.

<u>Payments to:</u>	<u>To A.G.M. of 1793</u>	<u>From A.G.M. of 1793</u> <u>to A.G.M. of 1794.</u>	<u>From A.G.M. of 1794</u> <u>to June 11th, 1795.</u>	<u>Total.</u>
John Jagger	—	£ 345.19. 6	£ 596. 2. 6	£ 942. 2. 0
William Bonner	£1,392.15. 6.	£1,079.15. 3	—	£2,472.10. 9
John Dyson	£ 105. 0. 0	£1,555.10. 0	£ 20.19. 2	£1,661. 9. 2
John Langwith	£ 250. 0. 0	—	—	£ 250. 0. 0
Peter Tyler	—	£1,450. 0. 0	—	£1,450. 0. 0
Dyson and Co. or Wm. Bonner	£2,415. 8.11	£ 105. 0. 0	—	£2,520. 8.11
Canal workers	—	£ 25.11. 0	—	£ 25.11. 0
Rowland Myers	—	£ 429.16. 6	£ 207. 9. 0	£ 637. 5. 6
J. Cartwright	—	£ 51. 7. 0	£ 34. 6. 1	£ 85.13. 1
W. Rylot	—	£ 148.14. 7	£ 166.19.10½	£ 315.14. 5½
Freight carriers	—	£ 129. 8. 3	£ 91.17. 1	£ 221. 5. 4
Others	£ 14. 2. 3	£ 660. 7.10½	£1,232.18. 3	£1,907. 8. 4½
	£4,177. 6. 8	£6,011. 9.11½	£2,350.11.11½	£12,539. 8. 7

Total known expenditure up to the opening of the Navigation to traffic = £10,189.16. 7½d.

SUMMARY OF KNOWN EXPENDITURE, 1793 - 5

APPENDIX ETHE OTHER CANAL INTERESTS OF THE ORIGINAL SHAREHOLDERS IN THE
SHEPHERD NAVIGATION COMPANY.

BLAND, Thomas* : A member of the Trent Navigation Committee, 1816-35.

BOSTON CORPORATION : Held 10 shares in the Horncastle Navigation,
1795.

CLARKE, Henry : See GEE, Henry).

DARWIN, DR. Erasmus* : Signed the report of the promotion meeting of
the Derby Canal, September 14th, 1791.

Held 8 shares in the Nottingham Canal, 1797.

DARWIN, Robert Waring* : Held at least 5 shares in the Shrewsbury
Canal, 1798.

A member of the Shrewsbury Canal Committee,
1832-(40) and the Shropshire Canal Committee,
1825-6, 1835-(40).

ELIISON, Richard : Lessee of the Fossdike Canal.

A member of the Don Navigation Committee, to 1795.
Chairman of the inaugural meeting of the Stainforth
and Keadly Canal, 1792 and of the Deane and Dover
Canal, 1792. Chairman of the Horncastle Canal and
held 12 shares in that enterprise, 1795.

EYRE, William (senior)* : Held 5 shares in the Grantham Canal, 1795.

EYRE, William* : A member of the Trent Navigation Committee, 1783-1812.
Held 10 shares in the Cromford Canal, 1789.

FELLSHAM, William* : A member of the Trent Navigation Committee,
1783-95 and the Cromford Canal Committee,
1789-95.

Held 10 shares in the Cromford Canal, 1789-97
and 5 shares in the Grantham Canal, 1793.

(See also, "The Nutbrook Canal, Derbyshire",
P. Stevenson. (DSC 1970) p.17 & 30.)

FIDELL, Thomas : Held 4 shares in the Horncastle Navigation, 1795.

GEE, Henry : With Henry Clarke (under the title of "Messrs. Gee & Clarke", of Boston) held 4 shares in the Horncastle Navigation, 1795.

LAURENCE, Joseph* ; Held 10 shares in the Grantham Canal, 1793.

Grantham Canal Treasurer, 1793.

MASSEY, John* : Promoter of the Newcastle-under-Lyne Junction Canal, 1798.

Clerk to the Newark Navigation Commissioners, 1804.

TURNER, John* : With Benjamin Turner, a member of the Grantham Canal Committee, 1799.

* = Probably or possibly introduced by William Jessop when he lived at Newark and was engineer on the Trent and Grantham Canals. He was also engineer on the Nottingham Canal and was the possible introducer of the Darwins through his connection with the Shropshire and Ellesmere (to Shrewsbury) Canals.

Additional source: M.C. Hadfield.

APPENDIX FCONTRACTS MADE FOR THE CONSTRUCTION OF THE SLEAFORD NAVIGATION.

<u>CONTRACT</u>	<u>AWARDED TO</u>	<u>CONTRACT PRICE</u>	<u>DATE OF MINUTE BOOK ENTRY</u>
1. Widening and deepening Kyme Eau from the Witham to the lock at Flax Dyke.	William Bonner	-----	31.7.1792
2. For erecting two locks on Kyme Eau.	John Dyson, John Langwith, Peter Tyler.	-----	25.8.1792
3. Two bridges, one at Five Willow Wath, the other at S. Kyme Ferry.	John Langwith	£110 each	3.9.1792
4. a) Staunch at the Bottom Lock.	John Dyson,	a) £114.10.0	18.9.1792
b) Staunch at Anwick Lock	John Langwith,	b) £120	
	Peter Tyler.		
5. a) Bridge alterations at South Kyme.		a) £46.4.0 each.	
b) For a watch house at the Bottom Lock.	.. ditto..	b) £52.10.0	29.10.1792
6. For the locks on the Sleaford Mill Stream	.. ditto..	£3,186	30.10.1792
7. Widening and deepening the river from Anwick Lock to Sleaford Castle Causeway.	William Bonner	£1,665 + 10% for contingen- cies.	21.1.1793

8. Four swivel bridges, one each at Doughty's, Cropper's, Dyer's and Cogglesford Mills.	John Jagger	£50 each.	18.2.1793
9. For part of the Hospital yard to be used for a wharf.	Rev. Edward Waterson	£400 (paid in shares, nos. 131-4)	18.2.1793
10. Bridges: i) in George Yard, Sleaford ii) in Town Street, S'ford. iii) at Haverholme Mill. iv) at the Paper Mill.	John Dyson & Co.	—————	18.5.1793
Also walling the Navigation through the town.			
11. Cleaning Kyme Eau between the Bottom Lock and the Witham.	John Dyson	Ed. per cubic yard.	27.5.1793
12. For cutting a basin in Sleaford	—————	—————	27.5.1793
13. For a lock house at Anwick Lock.	—————	—————	28.10.1793

APPENDIX GOFFICIALS OF THE SLEAFORD NAVIGATION COMPANY, 1792 - 1831.A. CHAIRMEN OF THE COMMITTEE OF PROPRIETORS.

Anthony Peacock.	1792 - 1809.
John Andrew Peacock. ¹	1809 - 1821.
Anthony Taylor Peacock. ²	1821 - 1829.
John Andrew Peacock. ³	1829 - 1834.
Anthony Peacock. ⁴	1834 - 1866.
John Taylor Harston.	1866 - 1881.

B. COMPANY TREASURERS.

Benjamin Handley.	1792 - 1824.
John Pearson.	1824 - 1829.
Charles Pearson.	1829 - 1846.
William Hungerford Holdich.	1846 - 1881.

C. CLERKS TO THE COMPANY.

Benjamin Cheales.	1792 - 1824.
William Forbes.	1824 - 1842.
William Foster.	1842 - 1858.
Henry Feake.	1858 - 1881.

1 Second son of Anthony Peacock.

2 Eldest son of Anthony Peacock.

3 Reappointment.

4 Son of Anthony Taylor Peacock. He changed his name to "Willson" in 1851.

D. MEMBERS OF THE COMMITTEE OF PROPRIETORS.

<u>NAME</u>	<u>OCCUPATION</u>	<u>PLACE OF ABODE.</u>	<u>YEAR FIRST APPOINTED</u>	<u>YEAR LAST APPOINTED</u>	<u>No. OF TIMES ELECTED TO SERVE.</u>
<u>AINSWORTH,</u> James.	Mercer	S.	1792 [*]	1803	12
<u>ANDREWS,</u> Rev. John.	Clerk	S.	1792 [*]	1798	7
<u>CHARLES,</u> Benjamin	Solicitor	S.	1792 [*]	1825	32
<u>FISHER,</u> William.	Baker	E.	1792 [*]	1810	19
<u>HANDLEY,</u> Benjamin.	Banker & solicitor.	S.	1792 [*]	1823	32
<u>HATTON,</u> William.	Banker	S.	1792 [*]	1828	37
<u>PEACOCK,</u> Anthony.	Banker	S.K.	1792 [*]	1809	18
<u>TINDALE,</u> Thomas.	Grazier	E.T.	1792 [*]	1803	12
<u>WATSON,</u> Rev. Ed.	Clerk	S.	1792 [*]	1800	9
<u>WOODFORD,</u> John.	Mercer	S.	1792 [*]	1811	20
<u>BRITAIN,</u> John.	Merchant	S.	1801	1818	18
<u>ALMOND,</u> William.	Miller	S.	1804	1815	12
<u>BATES,</u> Edward.	Immkeeper	S.	1804	1813	10
<u>PEACOCK,</u> John Andrew.	Banker	S.K.	1810 1830	1820) 1834)	16
<u>TINDALE,</u> Thomas.	Farmer	E.T.	1811	1831	21
<u>STURTON,</u> John.	Brewer	S.	1812	1827 & '29	17
<u>BROWN,</u> James.	Grazier & Brickm'k'r.	S.	1814	1831	18
<u>ROBERTS,</u> Richard.	Solicitor	S.	1816	1833	18
<u>PEACOCK,</u> Anthony Taylor.	Banker	S.K.	1821	1829	9
<u>TINDALE,</u> Thomas.	Grazier	E.T.	1825	1833	9

<u>HARE,</u> Charles.	Solicitor	S.	1828	1833	6
<u>FANGETT,</u> Thomas.	Draper	S.	1830	1831	2
<u>POTTER,</u> William.	Solicitor	S.	1832	1841	10
<u>HANBLEY,</u> Henry.	Banker	C.	1832	1837	6
<u>MCNEBRAY,</u> John.	Corn m'ch't.	S.	1832 1850	1848) 1855	23
<u>HARRINGTON,</u> Edward	Butcher	S.	1834	1838	5
<u>PAYNE,</u> John.	Timber m'cht	S.	1834	1838	5
<u>WILLIAMS,</u> Rowland.	Blacksmith & Ironm'ger	S.	1834	1848	15
<u>PEACOCK,</u> Anthony	Banker	S.K.	1835	1866	32
<u>(WEBBSON)</u>	AFTER 1851	S.R.			
<u>BRADLEY,</u> Richard	Gent.	G.	1838	1854	17
<u>BEDFORD,</u> John Raynor.	Surgeon	S.	1839		1
<u>SNICK,</u> Benjamin	Waltster & farmer	S.	1839	1859	21
<u>WALKER,</u> William Gregory.	-	S.	1840		1
<u>HOLDICH,</u> William Hungerford	Solicitor	S.	1841	1846	6
<u>MOORE,</u> Maurice Peter	Solicitor	S.	1842	1866	25
<u>WARRICK,</u> John	Bank manager	S.	1847	1861	15
<u>CURLEY,</u> Tanberlain	Farmer	G.	1849	1867	19
<u>PEAKE,</u> Henry.	Solicitor	S.	1855	1875	20
<u>BEECHAN,</u> William.	Grazier	E.T	1856	1863	8
<u>HOLDICH,</u> Charles William.	Solicitor	S.	1858	1878	21
<u>PAYNE,</u> John	Coal & corn m'ch't	S.	1860	1863 & '75	5

<u>HOUGH,</u> Edward Lynch.	Chemist	G.	1862	1868	7
<u>HARSTON,</u> John Taylor	Brewer & coal m'ct't	S.	1864	1873	15
<u>SNOW,</u> Henry.	Solicitor	S.	1864	1872	9
<u>BURBRIDGE,</u> John Fowler.	Wine m'ch't	G.	1867	1874	8
<u>RODGERS,</u> Charles.	Solicitor	S.	1867	1876	10
<u>PAYNE,</u> Rowland William	Merchant	S.	1868	1873	6
<u>WILSON,</u> Wilmey William.	Soldier	S.R.	1869	1875	7
<u>FARREY,</u> Thomas.	Architect & builder	S.	1873	1878	6
<u>INGOLDBY,</u> Henry.	Bank manager	S.	1874	1878	5
<u>LOWE,</u> Thomas.	Farmer.	S.	1876	1878	3
<u>EGGSON,</u> Samuel.	Farmer	A.	1876	1878	3
<u>HERVEY,</u> William.	Land agent.	-	1877	1878	2

KEY

* Appointments in 1792 were from June 2nd. rather than from
the first Tuesday in May as in all other years.

A = Anwick.

Q = Quarrington.

E = Ewerby Thorpe.

S = Sleaford.

G = Grantham.

S.K. = South Kyme.

K = Kirkby Lathorpe.

S.R. = South Rauceby.

APPENDIX IITOLLS COLLECTED ON THE WITHAM NAVIGATION FROM VESSELS TRAVELLINGTO AND FROM SLEAFORD, 1813 - 1846. (to nearest £).

<u>YEAR ENDING,</u>	<u>TO SLEAFORD</u>	<u>FROM SLEAFORD</u>	<u>EXTRA</u>	<u>TOTAL</u>
<u>MARCH 31st.</u>				
1814	309	82	5	396
1815	372	87	6	465
1816	228	54	-	282
1817	405	147	18	570
1818	476	204	4	684
1819	456	111	8	575
1820	473	134	31	638
1821	523	151	37	711
1822	503	200	19	722
1823	476	183	11	675
1824	594	284	21	899
1825	615	248	12	875
1826	676	183	8	872
1827	602	224	11	837
1828	611	301	37	949
1829	592	227	5	824
1830	603	168	15	786
1831	689	244	1	934
1832	683	214	10	907
1833	738	201	11	950
1834	718	93	1	812
1835	712	210	8	930
1836	791	304	14	1109
1837	718	238	6	962
1838	854	273	27	1154
1839	877	314	8	1199
1840	924	268	29	1221
1841	923	260	13	1196
1842	940	257	17	1214
1843	838	264	14	1166
1844	837	303	14	1204
1845	831	393	16	1290
1846	956	377	54	1381

Source: Witham Navigation Account Books, Lincoln Archives. Due to the poor state of preservation of these records they are no longer available for general public inspection.

APPENDIX ITONNAGES CARRIED ON THE SLEAFORD NAVIGATION, 1813-46 & 1859-78

A. Estimated tonnages carried upon the Witham Navigation and going to and from Sleaford. (Based on the figures in Appendix H. See also pp.189-191).

<u>YEAR ENDING</u>	<u>TO SLEAFORD</u>	<u>FROM SLEAFORD</u>	<u>EXTRA</u>	<u>TOTAL.</u>
<u>MARCH 31st:</u>				
1814	3174	954	65	4193
1815	3754	978	67	4799
1816	2241	660	-	2901
1817	3981	1797	218	5996
1818	4764	2437	43	7244
1819	4574	1282	90	5946
1820	4706	1513	372	6591
1821	5279	1750	438	7467
1822	5056	2259	233	7548
1823	4790	2127	132	7049
1824	6028	3085	248	9361
1825	6341	2656	140	9137
1826	6648	2031	70	8749
1827	6165	2295	126	8586
1828	6053	3299	439	9791
1829	5862	2419	58	8339
1830	6071	1720	184	7975
1831	6777	2566	10	9353
1832	6768	2284	119	9171
1833	7323	2184	134	9641
1834	7187	1062	8	8257
1835	7204	2190	91	9485
1836	7923	3067	170	11160
1837	7219	2406	79	9704
1838	8644	2734	323	11701
1839	8827	3132	94	12053
1840	9333	2700	346	12379
1841	9151	2567	157	11875
1842	9511	2652	207	12370
1843	8925	2657	165	11747
1844	8899	3042	164	12105
1845	8857	3896	190	12943
1846	9644	3722	650	14016

B. Total tonnages of all goods carried on the Navigation, 1859-78

<u>YEAR ENDING</u> <u>MARCH 31st.</u>	<u>TOTAL</u>
1859	11306
1860	6757
1861	5029
1862	4541
1863	4087
1864	3515
1865	3696
1866	4216
1867	5357
1868	3362
1869	3147
1870	4362
1871	1759
1872	2103
1873	2760
1874	4190
1875	3190
1876	3311
1877	2741
1878	2642

Source: Sleaford Navigation Account Books, Lincoln Archives.

APPENDIX JCASH RECEIPTS ON GOODS CARRIED ON THE SLEAFORD NAVIGATION.

A. Estimated receipts on the Sleaford Navigation from tolls collected on goods travelling to and from Sleaford and passing on the Witham Navigation, 1813-46. (Based on the figures in Appendix H.)

<u>YEAR ENDING</u>	<u>TO SLEAFORD</u>	<u>FROM SLEAFORD</u>	<u>EXTRA</u>	<u>TOTAL</u>
<u>MARCH 31st.</u>	(at 2/- a ton)	(at 2/- a ton)	(1/3 a ton)	
1814	2300	£ 95	£ 4	£ 399
1815	351	98	4	453
1816	210	66	-	276
1817	487	180	14	681
1818	445	244	3	692
1819	427	128	6	561
1820	440	151	23	614
1821	494	175	27	696
1822	473	226	15	714
1823	448	213	8	669
1824	563	308	15	886
1825	593	266	9	868
1826	618	205	4	825
1827	576	229	8	813
1828	566	330	27	923
1829	548	242	4	794
1830	567	172	11	750
1831	634	257	1	892
1832	633	228	7	868
1833	684	218	8	910
1834	672	106	1	779
1835	673	219	6	898
1836	741	307	11	1059
1837	675	241	5	921
1838	808	273	20	1101
1839	825	313	6	1144
1840	872	270	22	1164
1841	855	257	10	1122
1842	829	265	13	1167
1843	861	266	10	1137
1844	832	304	10	1146
1845	828	390	12	1230
1846	901	372	41	1314

B. Actual toll receipts taken on all goods passing on the Cleaford Navigation, 1851 - 78.

	<u>YEAR ENDING</u>	<u>TOTAL</u>
	<u>MARCH 31st.</u>	
Sept. 1851 - March, 1852		£1024
	1853	1681
	1854	1852
	1855	1685
	1856	1993
	1857	2124
	1858	981
	1859	565
	1860	338
	1861	251
	1862	227
	1863	204
	1864	176
	1865	185
	1866	211
	1867	168
	1868	168
	1869	157
	1870	210
	1871	88
	1872	105
	1873	138
	1874	210
	1875	159
	1876	166
	1877	137
	1878	132

APPENDIX KTHE RENTING OF THE WHARF, WAREHOUSE AND YARD.

<u>NINTH BOOK ENTRY</u>	<u>RENTER OF THE YARD</u>	<u>PRICE AND PERIOD</u>
11.9.1797	Messrs. Harrison & Hall (mentioned as "lately" occupying the wharf yard.)	-
11.9.1797	John Blundell of Lincoln, merchant.	5 guineas p.a. (until 18.11.'99)
18.11.1799	Joseph Toosdale & Samuel Darwin of Boston.	2 guineas p.a. (until 9.5.'03)

During the above period the wharf and warehouse were occupied by Thomas Rodgers, an employee of the Navigation Company. From May 9th. 1803 the wharf, warehouse and yard were let by auction when, at the letting, the rights of wharfrage were also relinquished by the Navigation in favour of the lessee.

LESSEE

9.5.1803	John Preston of New Sleaford and Samuel Darnsdale of Newark.	£50 p.a.
23.2.1807	William Cragg of Hybarton Roads & Thomas Sneath of Normanton (Sneath from 20.5.'07)	£50 p.a.
9.2.1808	Messrs. Harrison & Hall (from April 6th. 1808).	£36 p.a. for 3 years.

No further details until 1825. Then Christopher Stacey is found in occupation.

<u>MINUTE BOOK</u>	<u>LESSEE</u>	<u>PRICE AND PERIOD</u>
3.6.1828	John Smith of New Sleaford	£60 p.a.
11.6.1829	John Smith	£50 p.a. for 7 yrs from 19.5.1829
5.5.1836	William Farry of Lincoln	£100 p.a. for 3 yrs.
7.5.1839	Joshua Bower of Hunslet.	£125 p.a. for 6 yrs.
25.5.1845	John Nicholls of New Sleaford	£80 p.a. for 3½ yrs

The premises remained without a lessee from September 1st, 1848 until April 6th, 1849 and were managed during this time by Mr. Payne for the Navigation Company.

6.4.1849	Thomas Stainage	£60 p.a.
6.4.1850	John Payne	£52/10/01. p.a. for 7 yrs.
6.4.1858	Robert Parker (an omnibus proprietor who seems to have taken the lease on an annual basis).	£55 for 1 year. Reduced to £45 p.a. in May, 1865.
7.5.1867	Robert Parker (from 6.4.'66 - 24.6.'67).	£40 p.a.
25.6.1867	Edward Allen of Sleaford.	£45 p.a. for 5 yrs.
18.6.1872	Edward Allen	£45 p.a. for 5 yrs.

APPENDIX LTHE LESSEES OF THE SLEAFORD NAVIGATION TOLLS, 1827-51.

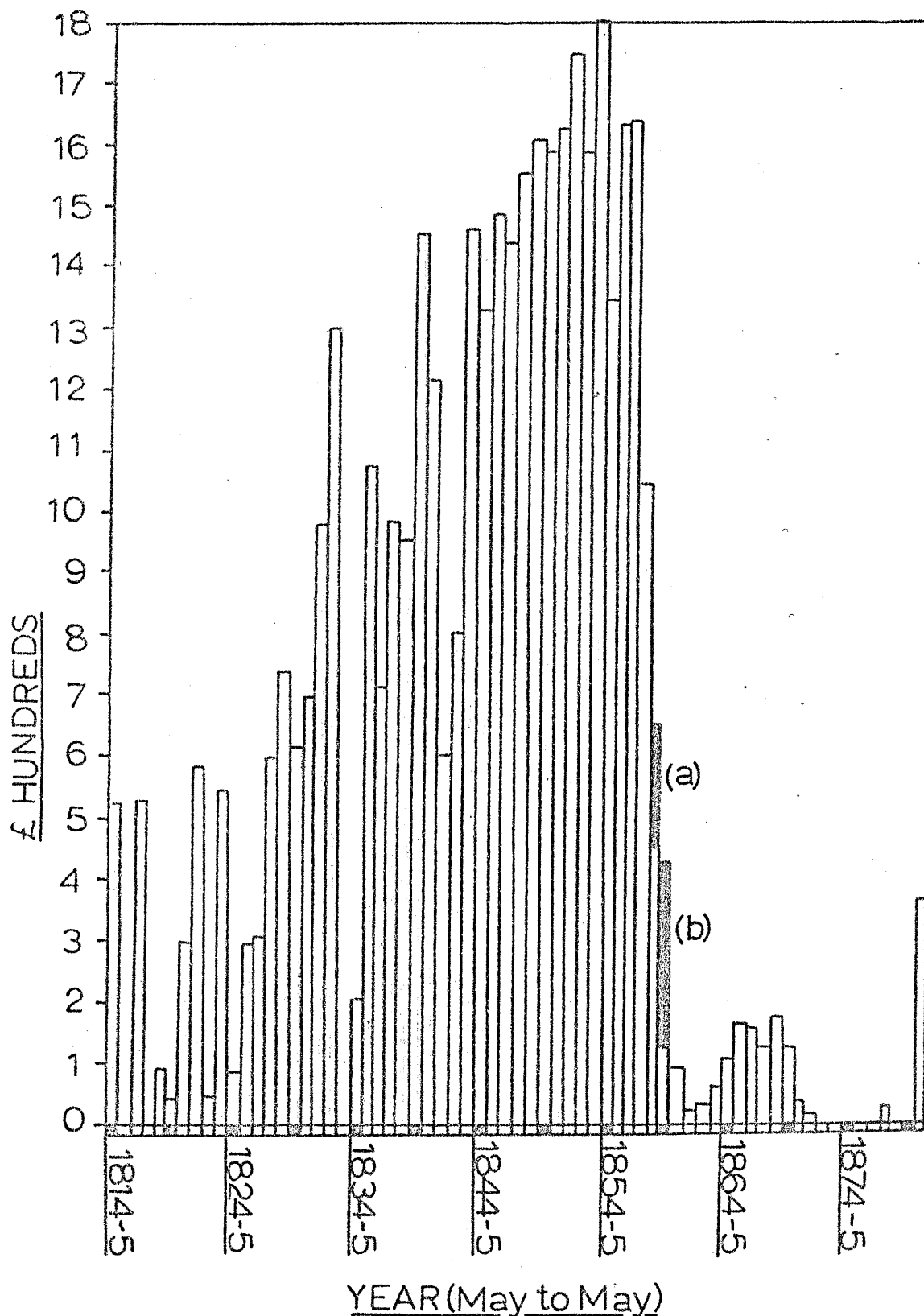
<u>LESSEE</u>	<u>SURETIES</u>	<u>PRICE P.A.</u>	<u>DATES</u>
John Keyworth	-	£1,010	1.9.1827 - 31.8.1828.
John Keyworth	-	£1,010	1.9.1828 - 31.8.1829.
John Keyworth	-	£1,010	1.9.1829 - 31.8.1830.
Enoch Blackburn (of Hunslet, Yorks)	-	£1,310	1.9.1830 - 31.8.1833.
Enoch Blackburn	Joshua & John Bower, of Hunslet.	£1,290	1.9.1833 - 31.8.1836.
Joshua Bower, (glassmaker, of Hunslet, Yorks.)	John Bower & Enoch Blackburn	£1,340	1.9.1836 - 31.8.1839.
Joshua Bower	..ditto..	£1,590	1.9.1839 - 31.8.1842
John Hackett (coal merchant of Sleaford).	John Hackett of Lt. Hale.	£1,900	1.9.1842 - 31.8.1845.
Joshua Bower	Enoch Blackburn & Robt. Wood.	£1,700	1.9.1845 - 31.8.1848.
Joshua Bower	-	£1,625	1.9.1848 - 31.8.1851.

From September 1st, 1851 the Navigation Company itself took over the receipt of the tolls and appointed the ex-collector of Joshua Bower, William Favill, as Company Collector. He was dismissed on February 1st, 1853 and, from the previous December 27th., Anthony Stennett was appointed to this position.

APPENDIX N

THE SLEAFORD NAVIGATION BALANCES-IN-HAND, 1815 - 1881.

(from the time of the first regular dividend payment)



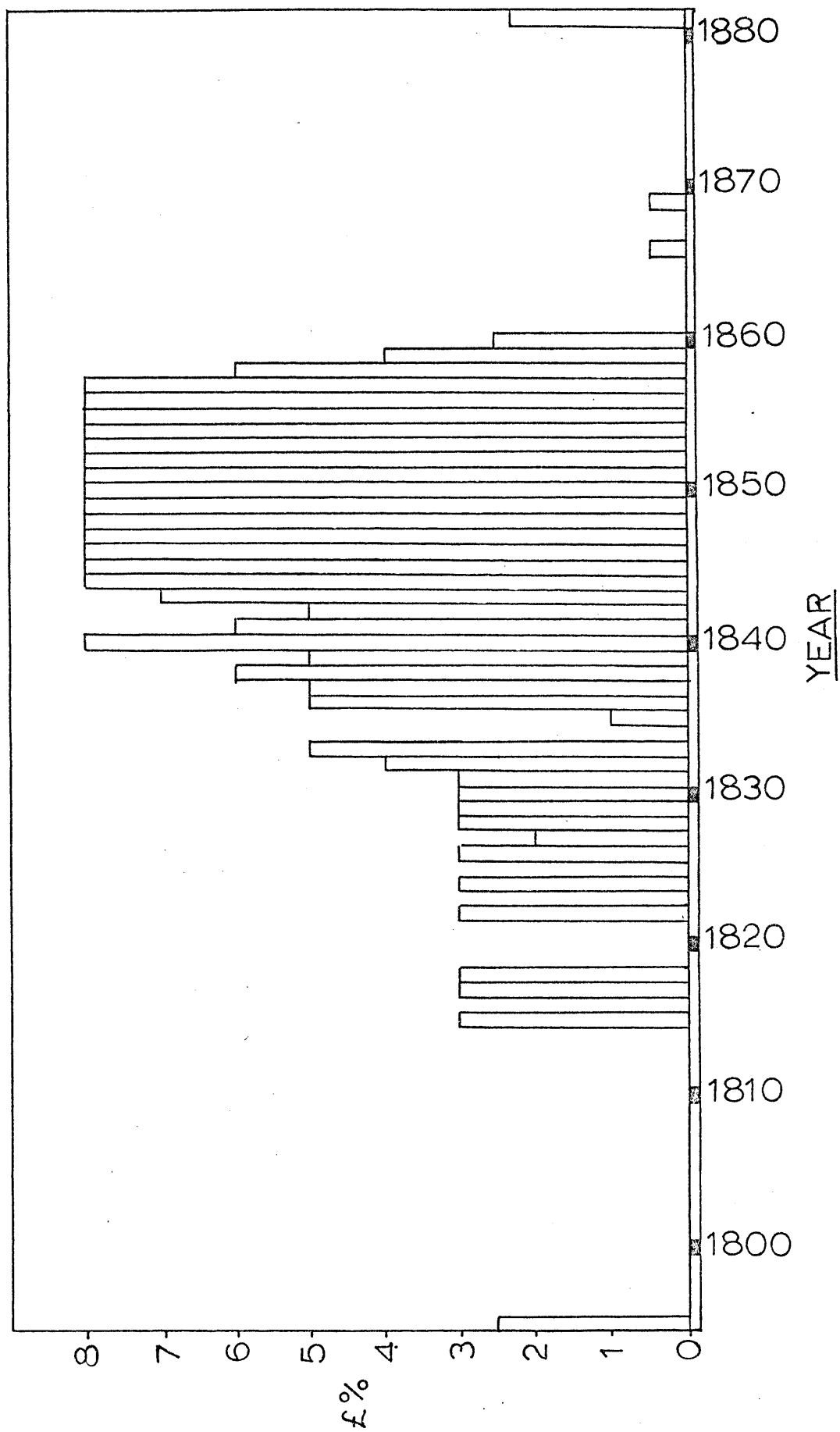
- (a) Including £200 from the redemption of Consols.
 (b) Including £300 from the redemption of Consols.

BALANCES-IN-HAND PRIOR TO THE PAYMENT OF THE FIRST REGULAR DIVIDEND

<u>YEAR ENDING</u>	<u>TOTAL (to nearest £)</u>
<u>APRIL 30th:</u>	
1793	945 -
1794	959 +
1795	444 +
1796	245 -
1797	169 -
1798	228 -
1799	60 +
1800	27 +
1801	39 +
1802	37 +
1803	137 +
1804	64 +
1805	16 +
1806	5 +
1807	40 +
1808	157 +
1809	60 +
1810	603 +
1811	44 +
1812	555 +
1813	none recorded.
1814	633 +

APPENDIX 0

SHAREHOLDERS' DIVIDENDS, 1795 - 1881.



APPENDIX PVESSELS TRADING TO SLEAFORD FROM THE TRENT NAVIGATION

The following information had been obtained from the Trent Navigation Boat Registers (RAIL 879, 67-78. British Transport Historical Archives) and each entry hereafter is in accordance with the following key,

Boat number, as noted in the register,

Owner, if known,

Master, if known,

Size of craft (length / width) : Draught empty / with 40 tons
Load,

Year of entry into the Trent Navigation Register.

SECTION A

If the vessel was physically capable of entering the locks on the Sleaford Navigation it is included in this listing when the reference reads, "to Lincoln, etc", or, "to Boston, etc." as it is likely that these boats also came to Sleaford.

277

Robert Fisher of Newark,

Richard Ashmore

67'9" / 13'9" : 9 $\frac{3}{4}$ " / 33.1"

"Coal to Lincoln, etc, Corn to Shardlow, etc."

1800.

278

John Ellis of Newark

John Ellis

65'3" / 13'9" : 9' / 34.2"

"Coal to Boston, etc., Corn to Shardlow, etc."

1800

487

William Braley of Cotgrave

William Braley

69'6" / 13'11" : 10 $\frac{1}{2}$ " / 34.35"

"Coal to Boston, etc., Corn to Nottingham."

1813

This vessel appears again in the lists of 1827 as

No.1275

618

William Catliff of Sutton

John Hasler

71'4" / 13'10 $\frac{1}{2}$ " : 8 $\frac{3}{8}$ " / 31.21"

"... the coal and lime trade to Boston, etc."

1813

625 (late 250)

George Hollingsworth of Sawley

George Hollingsworth

71'9"

"Corn trade to Boston, etc."

1813

676 (late 275)

William Curtis of Lincoln

William Curtis

66'11" / 13'6 $\frac{1}{2}$ " : 9 $\frac{3}{8}$ " / 33.89""... used on the coal trade to Lincoln, Boston, etc.
and corn to Nottingham, etc."

1813

679 (late 147)

Samuel Straw of Breason

Samuel Straw

67'9" / 13'10" : 9" / 31.94"

"Coal trade to Boston, etc."

1813

685 (late 84)

William Howard of Radcliffe

William Howard

67'6" / 13'7½" : 9½" / 32.51"

"Coal to Boston, etc., Corn to Nottingham, etc."

1813

692 (late 485)

George Athies of Nottingham

George Athies

67'8" / 13'8½" : 9½" / 32.47"

"Coal to Boston, etc., Corn to Nottingham, etc."

1813

702 (late 346)

Robert Fisher of Newark

Robert Fisher (see also 277)

66'9" / 13'7½" : 9¾" / 33.89"

"Coal to Lincoln, etc., Corn to Nottingham, etc."

1813

625 (late 454)

William Walster of Newark

William Walster

70' / 13'11" : 10 $\frac{1}{16}$ " / 32.55"

"Coal to Lincoln and Sleaford, Corn to Nottingham
and Shardlow."

1815

1027¹

Charles West of Lincoln

Richard Atkinson

67'9" / 13'10" : 9 $\frac{1}{8}$ " / 33.62"

"Trade with Boston and Nottingham and in taking
coal to Lincoln."

1821

1032¹

William Flint of Newark

John Pearson

52'4" / 12'5" : 8" / 26.90" with 20 tons aboard.

"... carrying werg out of the Lincoln and
Witham Navigations."

1821

1035¹ (late 530)

John Taylor of Lincoln

John Taylor

67'7" / 13'1 $\frac{1}{2}$ " : 10 $\frac{1}{8}$ " / 36.38"

"Coal trade with Lincoln and Boston, corn to
Nottingham and Shardlow."

1821

¹ These boats traded on the Witham and were physically able to reach Sleaford.

1335

Messrs. Hurst & Carby of Newark

John Hurst

71'10" / 14' : 10½" / 33.37"

"... used since then [1827] in the coal trade to
Sleaford and Boston and corn to Nottingham and Derby."

1837

1345

William Watson of Newark

William Watson

71'8" / 13'7" : 10½" / 33.61"

"Trade with Boston, etc."

1837

1379

William Skinner of Sutton

Richard Truswell

71'10" / 13'7½" : 10½" / 33.64"

"Coal to Boston, etc., Corn to Nottingham and
Derby, etc."

1837

1381

Thomas Berresford of Lincoln

Thomas Berresford

71'6" / 13'9" : 12½" / 35.83"

"Coal to Boston, etc., Corn to Nottingham
and Derby."

1837

1398 (late 836)

John Pyatt of Nottingham

Jacob Eaton

71'9"

"Coal to Boston, etc., Corn to Nottingham, etc."

1837

1437 (late 675)

Samuel Barnsdall of Nottingham

Samuel Turner

71'7" / 15'9 $\frac{3}{4}$ " : 10 $\frac{1}{2}$ " / 33.57"

"Coal to Sleaford, etc., Corn to Nottingham."

1837

1473

William Hooton of Sutton

William Hooton

71'9"

"Coal trade to Lincoln, etc., Corn to Nottingham
and Derby."

1842

1477

John Kirk of Horncastle

George Pass

71'9" / 13'9 $\frac{1}{2}$ " : 10 $\frac{1}{2}$ " / 33.57"

"Coal to Horncastle, etc., Corn to Nottingham
and Derby."

1842

1597

Joseph Turner of North Clifton

Joseph Turner

71'6" / 15'11" : 12 $\frac{1}{2}$ " / 35.40""Coal to Sleaford, Corn to Nottingham, Derby
and Shardlow."

1842

1616

Samuel Turner of Newark

Samuel Turner

69'9" / 14' : 12 $\frac{1}{2}$ " / 35.68"

"Coal to Sleaford, Corn to Shardlow and Derby."

1842

1622¹

John Kirk of Horncastle

John Brown

71'7" / 14' : 13 $\frac{1}{2}$ " / 35.96"

"Coal to Horncastle, Corn to Nottingham and Shardlow."

1855

1737

John Capewell of Heckington

John Capewell

69'1" / 6'10" : 11 $\frac{1}{2}$ " / 34.03"

"Coal trade to Heckington and Sleaford."

1855

¹ Like No.1477, also owned by John Kirk, this vessel also probably traded to Sleaford and so is included here.

SECTION B

Vessels which may have traded with Sleaford, there being no "etc." after the destination mentioned in the load.

- 148 John Marshall of Lincoln; John Marshall; 67'10" / 13'11" : 9 $\frac{1}{2}$ " / 32.44"; "Coal to Lincoln, malt to Shardlow"; 1800.
- 1046 (late 35) Robert Hill of Denington Bridge; Robert Glover; 68' / 13'11" : 10" / 33.42"; "Coal to Boston and Denington Bridge and corn to Nottingham." ; 1821.
- 1080 (late 93) William and Thomas Hooton of Sutton (see no.1473); William Hooton; 67'9" / 14' : 10 $\frac{1}{6}$ " / 33.63"; "Coal to Lincoln, corn to Nottingham." ; 1821.
- 1277 (late 33) Edward Brownlow of Ossington; Richard Truswell (see no.1379); 67'9" / 14'4" : 11 $\frac{1}{6}$ " / 33.55"; "Coal to Boston, corn to Nottingham and Shardlow"; 1827.¹
- 1375 William Pynt of Nottingham; Thomas Widdowson; 71'8" / 13'7" : 9 $\frac{1}{2}$ " / 32.76"; "Coal to Boston, corn to Nottingham and Derby." ; 1837.
- 1384 William Cocking of Rolleston; Joseph Sanders; 71'6" / 13'8 $\frac{1}{2}$ " : 12 $\frac{1}{4}$ " / 35.49"; "Coal to Boston, Corn to Nottingham and Derby." ; 1837.
- 1424 Selby Dickenson of Lincoln; Henry Harriott; 71'9" / 13'8 $\frac{1}{2}$ " : 11" / 34.22"; "Coal to Lincoln, Corn to Nottingham and Derby." ; 1837
- 1425 Richard Harriott of Lincoln; William Edgeley; 71'4" / 13'10" : 10 $\frac{3}{4}$ " / 33.72"; " Coal to Lincoln, Corn to Nottingham, Derby, etc." ; 1837.
- 1433 Cornelius Emerson of Boston; Richard Truswell (see nos.1277 & 1379); 71'6" / 13'10" : 10 $\frac{7}{8}$ " / 33.91"; "Trade between Shardlow and Boston" ; 1837.

¹ This vessel appears again in the lists of 1837 as no.1341.

- 1521 Joseph Skinner of Boston; Joseph Skinner; 71'4" ; "Coal to Boston, corn to Nottingham and Derby." 1842.
- 1586 Messrs. Pacey & Darnell of Nottingham; Elijah Pacey ; 71'9" / 13'11" : 12" / 34.72" ; "Coal to Boston, corn to Nottingham and Derby." 1842.
- 1726 William Foster of Lincoln; William Cook; 71' / 10'6" ; 13 $\frac{1}{2}$ " / 36.91" (with 30 tons); "Coal to Lincoln." ; 1855.

APPENDIX QTHE SCHEDULE OF GOODS AS NOTED IN THE WHARF CONTRACTS.

This schedule refers to the charges made on various goods left on the wharf before or after being carried on the Navigation. It is a much better guide to the actual type of goods carried than the "What makes a ton" document illustrated following p.165.

"The Schedule

Pipe, piece or paunchion of wine or spirits.....	1/-	[a month]
Hogsheads ¹ , packed or solid.....	6d.	
Tierce ²	4d.	
Barrels of rice.....	3d.	
Chests of tea or fruit.....	1d.	
Packet of hops.....	2d.	
Bag of salt and bag of nails.....	1d.	
Parcels, trusses or bales, under 1 stone.....	1d.	
H.B. If above that weight, to be paid for in proportion.		
Wheat and beans, per quarter.....	2d.	
Barley and oats, per quarter.....	1½d.	
Coals, per chaldron ³	2d.	
Bones, or other kinds of manure, per ton.....	2d.	
Oil cakes, per ton.....	6d.	
Timber and deals, per ton.....	4d.	
Iron, per ton.....	6d."	

Source: Agreement of 1808, Sleaford Navigation Committee Minutes,

February 9th. 1808. A similar agreement was made in 1835 in which the commodities listed are identical.

1 52½ imperial gallons.

2 35 imperial gallons = ½ of a "pipe".

3 36 bushels.

APPENDIX E

The following is a copy of a document which set forward the position regarding the various liabilities for the banks of Kyme Eau, etc. as it was seen by the Witham Drainage Commissioners in 1892.

"Kyme Eau Banks,

Observations.

It appears the making and maintaining the Banks of "Kyme Eau" formed a portion of the Scheme of the Witham Drainage under the original Act of 1762.

In the year 1791 the North Bank of Kyme Eau became vested in the North Kyme &c. Trustees under the provisions of the Act then passed 31 Geo. III c.70 (p.28-30-37).

The Act establishing the Sleaford Navigation was passed in the following year 1792 32 Geo. III c.106.

The North Kyme &c. Act was subsequently amended in the year 1840 by the Billingham Fen &c. Act 5 Vict. 19th. June, 1840 and the North Bank of Kyme Eau continues under the care of the Billingham Fen &c. Trustees who let the herbage of the Banks where the same are not enjoyed by the Riparian Owners or their Tenants under 41 Vict.c.88, 17th. June, 1878 "Sleaford Navigation Abandonment Act", it is provided by section 15 as to roding, scouring and cleansing Kyme Eau and the repairing and maintaining the Banks of the said River that the duty and liability after the powers of the Navigation Comooany shall cease shall fall upon the body or bodies person or persons party or parties who would but for the passing of the "Sleaford Navigation Act 1792" have been liable.

Shortly after the passing of the Sleaford Navigation Abandonment Act, i.e. 28th. August, 1880. a meeting with the Riparian Owners took place at Haverholme Friory and an Agreement was entered into with them providing for 3 roding of Kyme Eau to take place annually the

expense £30 to be borne by the Riparian Owners.

This Agreement is determinable upon 6 months Notice.

The Sleaford Navigation Abandonment Act does not repeal the section in the Sleaford Navigation Act pa.15 directing the Staunch at Kyme Lower Lock to be under the care and management of the second district commissioners and the North and South Kyme Commissioners. I have not succeeded in ascertaining the existence at this date of any South Kyme Commissioners.

The General Commissioners receive rents for the herbage of the North Bank of Kyme Eau up to Chapel Hill Bridge and of the South Bank of Kyme Eau up to the Bridge and for a short distance above it.

For the whole of the remainder of the distance as far as Everby Fen Corner, the Clapps where the jurisdiction of the General Commissioners terminated, the Riparian Owners or their tenants have the benefit of the Banks either for haling boats using the lower lock as allowed by the General Commissioners under sec.12 of the Sleaford Abandonment Act or for herbage. The General Commissioners have never as far as can be ascertained repaired this bank in any way.

It is open to the General Commissioners, should they elect to do so, to close the lock and to terminate the navigation, sec.12 Sleaford Navigation Abandonment Act leaving the Staunch only to be used for drainage.

There are no funds available for the maintenance of these Banks under the original Act of 1862 (Note- a mistake for 1762) which included the Taxing of the whole of the six Districts of the Witham Drainage.

The Sphere of liability of the General Commissioners at the present date appears to be confined under the Act of 1865 to the

portion of Kyme Eau extending from Chapel Hill upwards to Kyme Lower Lock, and this for Drainage purposes only."

(This document then summarises the main points again.)

Dated: Witham Office, Boston. 31st. December, 1892.

From the Clerk to the Witham Drainage General Commissioners,
to, F.L. Fogson, of Slenford, Clerk to the Anwick and North
Kyme Commissioners.

From an original in this author's possession.

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