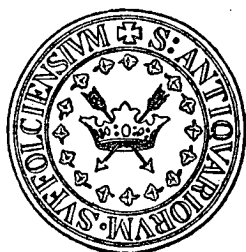


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THE RIVER STOUR NAVIGATION COMPANY

by J. S. HULL

In the 17th and 18th centuries interest in improving English rivers for transport purposes became widespread, and an extensive, though not integrated system, grew up. Before this period some attempts had been made to improve rivers, for the Exeter Canal had been built in 1564 to bypass the River Exe, and the Thames had had flashlocks on it since the 13th century, there being twenty-three between Maidenhead and Oxford in 1585. These were exceptions, however, and dependence on road transport to get goods to the ports was almost universal. At the beginning of the 17th century the Commissioners for Sewers brought about some improvements, mainly in an attempt to clear the cluttered-up rivers, but these Commissioners were hardly the correct people to improve transport. Before the Restoration there were some unimportant developments, the Warwickshire Avon in 1619 being the first. After the Restoration parliamentary legislation was required, and in the years from 1662-5 over a dozen authorizations were made, amongst them the Wiltshire Avon, the Wye and the Stour in the Severn basin and the Welland and Great Ouse in the Wash.

This sudden burst was due to several things, one being a return to peace after the Civil War and the long period of inactivity that the war had enforced. Associated with the return to peace was the growth in demand for agricultural products, especially to feed the growing population of London. At the same time the poundlock was becoming wellknown. Until the poundlock was introduced the most common method of getting over shallows was by the use of a flashlock, consisting of one gate with which a pent-up flood of water (a flash or stanch) could be released, allowing several barges to be floated along to the next deep part of the river. This method used water prodigiously and the river level took a long time to build up again. Boats going upstream required winches to tow them against the current. The poundlock, which eventually replaced the flashlock, consisted of an enclosed chamber with gates at both ends in which the water level could be raised or lowered, thus enabling gradients to be overcome and making entrance to tidal water easy. They had drawbacks—freezing up more easily, and requiring dredging—but these were minor compared with their advantages. Thus the poundlock gave a technical base for an efficient waterway system, while peace and a growing demand for agricultural goods gave an economic base.

Two more surges of building followed, the first being from 1697-1700, an interval of peace when money was 'cheap'. The second

surge came between 1719 and 1721 when Parliament authorised virtually everything that came before it in the joint-stock promotion fever of the time. By now there was very little scope for extension for nearly all the potentially useful rivers had been 'improved', and navigable rivers now totalled approximately 1,000 miles. The next step, towards joining these rivers into a national system, had to wait until the canal era which began with the Bridgewater Canal in 1760.

THE BEGINNING: 1705-1780

It must not be thought that improvements took place only within the three periods mentioned. Certainly these were the most important, but the intervening years were not inactive, and it was between the second and third surges of building that the Stour Navigation came into being. The 'Suffolk' Stour rises near Wrattling Common in Cambridgeshire, flows for a short time through the south-west corner of West Suffolk, and then becomes the border between Essex and Suffolk until it reaches the sea at Harwich. Flowing through a wide valley, liable to winter flooding, the river has long been a boundary line between counties, but earlier still between the kingdoms of Essex and East Anglia.

Virtually no use of the river for transport seems to have been recorded in early years, though we suppose that stone for the large churches in the area was floated up it. The first mention of an interest in improving the river comes in 1634 at Sudbury, but the Town Council were not interested enough to give any financial backing.^{1a} However in the next fifty years changes seem to have occurred. The increasing size of London was causing a greater demand for food and East Anglia was one of the best arable areas in the country, at the forefront of the 'Agricultural Revolution'. From the East Coast ports a growing amount of wheat and barley was being carried to London but the problem lay in getting the produce to the ports. Harwich, at the mouth of the river, had been a port since King Alfred's time, and barges already ran up to Manningtree where the river was still tidal, but even so there was a large area of North Essex and South Suffolk many miles from a waterway.

Two things occurred at the beginning of the 18th century that were to alter completely the pattern of transport in the area. The Rigby family, owners of Mistley Hall one mile downriver from Manningtree, built their own village at Mistley Thorn, with a new quay on the river. This was opened in 1705 and considerably increased the importance of Manningtree and Mistley as focal points in the area for transhipment from carts to barges bound for London.

The second occurrence took place soon after the quay was

^{1a} See *Proc. Suffolk Inst. Arch.* viii (1894) p. 28: xiii (1909), pp. 293, 299.

opened when an Act of Parliament was passed—‘The Act for making the River Stower navigable from the town of Manningtree in the county of Essex, to the town of Sudbury in the county of Suffolk, A.D. 1705’.¹ This navigation would be twenty-five miles long, twenty-three and half miles being actual ‘canalised’ river, that is, needing locks to maintain a head of water to allow the passage of boats.

The intention of the Act was clear—‘whereas the clearing and effecting of a passage for barges, boats, etc. by the River Stour from the town of Manningtree . . . to the town of Sudbury . . . will be very beneficial to trade, advantageous to the poor, convenient for the conveyance of coals, and other goods and merchandises, to and from the said towns and parts adjacent, and will very much tend to the employing and increase of watermen and seamen, and be a means to preserve the highways in and near the said counties and towns.’

The social aspects of this are interesting. One would have thought that commercial interests would be paramount in those days, but presumably the social improvements mentioned would give those responsible for passing the Act a better impression for at this time Parliament did not pass every Navigation Bill put before it. Certainly, anything to help the ‘poor’, and to employ more people, would be considered important in those times of inadequate poor relief. Many of the later railway bills introduced this social aspect of helping to improve the whole area, something they, and this Navigation, undoubtedly did. Less clear is how the Navigation was to ‘preserve’ the highways: the most likely reasons seem to be the payment of rates, the creation of more local prosperity, or the easier availability of road-building materials that could be brought in from other parts of the country.

The Stour Navigation would serve primarily Sudbury, this being reflected by the fact that the Mayor and Aldermen of Sudbury Borough Council were among the undertakers of the Act, along with ten others. Any seven of these could act at any one time. Powers granted to the undertakers were quite extensive—‘to make the said River Stour navigable, portable and passable for boats, barges, launches etc. from Manningtree to Sudbury, and from time to time to continue, support, maintain and use such navigation in such a manner as they shall think fit, and for that purpose to clear, scour, open, enlarge or strengthen the said River Stower, and to dig and cut the banks thereof; and to clear . . . any stream . . . that shall seem convenient for bringing water to the said River Stower thereby making the river more navigable for boats . . . , and to build up locks, weirs, turnpikes, pens for water, cranes, wharfs and ware-

¹ Essex Record Office, D/DU 73.1; printed copy of Act making River Stour navigable.

houses . . . also to appoint towing paths (locally known as haling ways) and ways convenient for towing boats etc.' Originally the concern was divided into forty-eight shares which were held under deed of settlement.

Several rivers had been improved before the Stour but the problems faced were still considerable for the time because in some respects the engineering problems of these river navigations were more difficult to solve than were those of the canals which were to follow—and these problems were met by men with no training in hydraulics. Although the Navigation followed a river and therefore had a constant supply of water, something the later canals were to find a serious problem, this supply was obviously too great to be locked back and weirs had to be built to take away the excess water. These with the need to keep a head of water along the Navigation for the millers, and the seasonal floods, must have made the building of the Navigation a considerable achievement. That knowledge of canal engineering was limited is shown by the fact that in 1836 William Cubitt, the eminent civil engineer, who had been Messrs Ransome's chief engineer at Ipswich from 1812 to 1821, was called in to suggest ways of improving the Navigation; the improvements made at his recommendation led to the Navigation being described as 'perfect'.²

Obviously the Undertakers were not interested in social benefits alone. The Act also stated that 'in consideration of great expenses the Undertakers will be at, not only in making the river navigable, but also in repairing weirs, etc. . . . it may be lawful for the said Undertakers to . . . ask, demand, recover and take from all and every person/s that shall send down or receive up goods etc . . . the rates and duties hereafter mentioned . . .'¹ Examples of these early tolls are few, but they do exist. Coal was the only item separated, costing 5/- for one chalder, Manningtree measure. All other merchandise was to be charged 5/- a ton or less; presumably this was to be fixed at a more local level, and not in the Act itself. No chance was to be taken that the tolls would not be paid; on non-payment, the Undertakers could sue, or detain goods until payment was made.

A few other points were considered: for instance bargemen could, if they wished, set up winches, to overcome the current where this was particularly strong, especially where there were flash-locks. Bargemen were to be held responsible for any damages caused, either to locks or banks, and could be sued for costs. In later times several bye-laws relating to this were passed; it seems that the increasing traffic caused the problem to worsen.

The owners of the land adjoining the Navigation were to be given considerable protection. Commissioners were to be appointed to settle any grievances between the Undertakers of the works and these

² Sudbury Archives, Order Book 1824-61.

proprietors and these Commissioners were men of some standing. They included the Earl of Dorset, Henry Lord Walden and Lord Huntingtower and were also responsible for the surveying of the route. Rights of fishing were preserved and it was to be lawful to enter any boat to seize fish, tackle and bait if the fisherman had no rights. Owners of the land could use pleasure boats free of charge and there were no tolls on muck or lime for neighbouring farmers or for stone, timber and lime for the mills. Thus these people were helped considerably. Wharfage fees were fixed at 3d a chaldler of coal or ton weight of any other merchandise. Finally, all boats had to be registered with the Town Clerk of Sudbury and had to have a registration mark on them, or risk a £5 fine.

Construction, Description of Route and Progress up to 1780.

Little time was wasted after the passing of the Act and in 1706 the Undertakers authorised Cornelius Denn and Dean Cock of London to execute the Act. They also bought much property along the river and erected buildings at a wharf at Sudbury.³ Work was, according to the Act, to begin by 24 June 1708, and was to be finished by 24 June 1713, thus giving the contractors five years to complete the job.¹ This 'deadline' appears to have been met, for there is in existence a map of Sudbury in 1714, and this shows a quay and warehouse at the bottom of Quay Lane. The Navigation thus seems to have begun operation by at least the latter half of 1713.

When built, the Navigation had thirteen locks, and was twenty-three and a half miles long from Sudbury Quay and Basin to the last lock, a tidal one, at Brantham. From there it was a mile and a half along the tidal river to Manningtree, and a further mile to the quay at Mistley Thorn, which was the final limit of the barges. The total journey was therefore twenty-six miles.

There is some disagreement over the dimensions of the barges. One book quotes a length of 27 ft. a beam of 9 ft., a draught of 3 ft. and an available headroom of 6 ft. The length and beam figures seem feasible, but there must be some doubt over the draught, as this seems an optimistic figure.⁴ Even in 1838, after extensive improvements to the Navigation, the draught was at the maximum 2 ft. 8 in. and this would be less in times of drought.⁵ The barges carried twenty-six tons and worked in pairs.

The dimensions of the barges show that the Navigation was built before the Canal Age, for their width falls midway between the barges on the 7 ft. wide 'narrow' canals, and the 14 ft. 'wide' canals. The locks themselves were 10 ft. wide, but this did not cause any

³ A. J. R. Waller, *The Suffolk Stour* (1957), p. 9.

⁴ C. G. Grimwood and S. A. Kay, *History of Sudbury* (1952), p. 104.

⁵ Sudbury Archives; Order Book 1824-61, 8/10/1838.

problems, for there was no connection with any other waterway and the barges were all locally built.

Traffic carried was mainly local agricultural produce, bricks, chalk and lime downstream, and coal, oils and other merchandise upstream. The barges were all horsedrawn and thus the 'haling' way was very important. Unfortunately, the necessity to change banks regularly, brought about by the difficulty of obtaining a right of way on one side all the way down the Navigation, meant that horses had to leap on to the barges and be carried across to the other side. (This is how 'The Leaping Horse' came to be the subject of one of Constables' most famous pictures.) The horses were specially trained to do this, but even so it was a time-wasting procedure. An example of this was at Bures where the towpath changed sides six times. As well as this the waterway was very twisty and although the bargemen soon earned a reputation for their skill at manipulating their barges around the sharp bends the journey still took a long time, the average being two days. This average obviously varied with the flow of the river but even though the time was reduced by later improvements it was far too slow to compete with the railways when they were built in the next century.

Most trade came from Sudbury, being the largest place on the Navigation, but there were several places on the Navigation which also provided valuable traffic. Going upriver from Brantham the first place of any size was Dedham, followed by Stratford St. Mary, Langham, Boxted, Horkesley, Nayland, Wiston, Wormingford, Bures and Cornard. Of these, Dedham, Bures and Nayland were the most important. There were mills at all these places, and at Flatford and Brantham.

Every lock was used as a toll stage, except that Sudbury and Cornard were taken together, so there were twelve different toll rates. Details of these are available as far as Manningtree and there is also a toll table from Sudbury to Mistley Thorn. These are found in a book of repairs dating from 1759 to 1800, but most of the tolls are in the front of the book, so almost certainly date from the 1759-70 period.⁶ These toll tables are reproduced below.

<i>Tolls: 1759-1770.</i>		<i>All tolls are to Manningtree</i>		
<i>From:</i>	<i>Wheat</i>	<i>Barley</i>	<i>Malt</i>	<i>Cloverseed</i>
Sudbury (20 qtrs)	8/-	6/-	4/-	-
Henny	7/7	5/8½	3/9½	-
Bures	6/5	4/6	3/-	-
Wormingford	5/4½	4/0½	2/8¼	-
Wiston	4/6¾	3/5¼	2/3½	-
Nayland	4/-	3/-	2/-	-

⁶ Sudbury Archives, Book of Repairs 1759-1800.

Boxted	„	3/3 $\frac{3}{4}$	2/3 $\frac{3}{4}$	1/6 $\frac{1}{2}$	4/8
Langham	„	2/8 $\frac{3}{4}$	2/0 $\frac{3}{4}$	1/4 $\frac{1}{2}$	3/6
Stratford	„	2/2	1/7 $\frac{1}{2}$	1/1	2/8
Dedham	„	1/7	1/2 $\frac{1}{4}$	-/9 $\frac{1}{2}$	1/10
Flatford	„	1/-	-/9	-/6	1/4
Brantham	„	-/5	-/4	-/2 $\frac{1}{2}$	-

This covered the main agricultural goods carried. The table to Mistley Thorn was made up of miscellaneous goods:

Miscellaneous goods. Sudbury to Mistley Thorn.

- Nails in 'baggs' - 3d a bagg.
- Butter in firkins - 1 $\frac{1}{4}$ d a firkin.
- Glass in crates - 5d a crate.
- Vinegar or Porter - 6d a barrell.
- Oil, in pipes - 2/4d a pipe.
- Pitch in barrells - 5d a barrell.
- Paper - 1/- per hundred bundles.
- Tallow - 2 $\frac{1}{4}$ d a cwt.
- Iron - 2 $\frac{1}{4}$ d a cwt.
- Lead - 1 $\frac{3}{4}$ d a cwt.

These latter figures show the reasonably wide variation of cargoes carried, and this is not a comprehensive list. It seems that coal was carried, but only Stratford and Sudbury are mentioned. There is, however, no mention of bricks, which in later years became one of the most important downstream cargoes, as brickworks developed at Cornard. The tolls were fixed at a time when there was little competition and so a fairly high rate could be charged. The monopoly lasted until the railways appeared, and then the tolls were cut drastically in an attempt to compete, but eventually to no avail.

The late 1770s seem to have been a turning point in the Navigation's history. A list of repairs carried out is available, and although this list begins in 1759, little seems to have been done, or at least is mentioned in the book, until the year 1771.⁶ In this year Dedham lock was built 'as new', followed by Flatford lock in 1777/8, and Nayland and Bures locks in 1779. Other extensive repairs were carried out at Henny and Langham locks in 1773.

This spate of heavy repairs carried on into the 1780s and 1790s, and by the time the book of repairs finishes, there had been a systematic rebuilding of the waterway. Whether this was part of a particular plan, like that of 1836, or whether it was because the condition of the locks necessitated urgent repairs, cannot be known, because the minute book of the time appears to have been lost. However, by 1780 the Navigation was well on the way to being in

first-class condition, ready for the great growth of traffic that was about to begin.

PROSPERITY: 1780-1848

Growth and Consolidation.

The year 1780 did not in itself mark any great improvement in the profitability of the Navigation but saw a development take place that almost certainly brought new life to the management structure. This was the passing of a new Act in October 1780⁷ 'for appointing new commissioners for continuing to carry into operation the . . . Act [of 1705] . . . in place of those . . . who are since dead; and for explaining and amending the Act'. In the 1780 Act it is stated that only two of the original commissioners survived (that these two did survive was indeed remarkable, for they must have been well over ninety years of age). Matters had obviously been brought to a head by this situation, for although there is no evidence of any problems, it seems unlikely that the two remaining commissioners could conduct their business satisfactorily—hence the new Act, the expenses of which were paid for by the Proprietors of the Navigation. The Act allowed new commissioners to be appointed and these could elect replacements should any of them die, thus ensuring that the present problem would not occur again. Five could act at any one time and meetings were to be held at the Queen's Head Inn, Nayland, on the last Monday of September each year. Amongst the new commissioners were prominent Sudbury men, John, Thomas and Edward Burkitt, Samuel and John Gainsborough and Stephen Oliver.

Various powers were given to the new commissioners; they could have towing paths set out, could pay rents to landowners whose river banks were damaged by boats or horses, and they were to look after the upkeep of the river, dredging it and maintaining bridges. They were given powers to make bye-laws which could involve punishment of bargemen who trespassed on private property, or embezzled goods, anyone who maliciously damaged the Navigation, and millers who obstructed the Navigation. Posts were to be placed along the river, marking the depth of water, and all boats had to have their names and numbers painted on them. The power to make bye-laws was used several times to deal with those who wasted water or penned back water to the detriment of millers.⁸

On the waterway itself, the heavy repairs begun in the 1770s continued until all locks had been covered. Cornard lock was dealt with in 1781, Brantham in 1787, Stratford in 1789-91, Wormingford

⁷ Essex, D/DU 73.2; 1780 printed copy of Act.

⁸ *Ibid.*, D/DU 73.4/6; Bye-laws.

in 1790 and Wiston in 1791. Also in the period, three horse bridges, usually called 'roving' bridges, were built where the towpath changed sides. These bridges were built at Higham Meadow and Langham Meadow in 1785 and at Stratford in 1790.⁶

Apart from the details of these repairs there is virtually no evidence available as to whether they were important or not. Whatever the reason behind them, they were extensive, and showed a confidence in the future. The main piece of evidence that is available, dating from 1797, is a copy of counsel's opinion on the 1780 River Stour Navigation Act⁹ which says 'be it observed that there was only four gangs of barges upon the Navigation until the year 1752/3, since which they have increased, and greatly within the last seven years to the number of eighteen and three single barges, all which are pretty constantly employed and passing up and down the river.' As a 'gang' consisted of two barges coupled together it can be seen that the number of active barges had risen from eight to thirty-nine. Most of this increase had been since 1790, the date of completion of most of the heavy repairs. Other evidence that points to increasing traffic is the attempt to get another new Act passed in 1803. The idea of this was to enlarge the powers of the commissioners and for further protection of the property of landowners; the passage of boats was wearing down the banks and land was becoming flooded. As the 1780 Act was silent on this and 'some other aspects', a new Act was called for.¹⁰ Despite meetings of the Proprietors no Act was passed; perhaps some easier and cheaper way was found to solve the problem.

River Improvements.

Nothing more is heard until 1825, when the existing order books and account books begin. By then the direct responsibility for the Navigation had been taken over by a W. Jones, who leased it for £650 per annum, in return for the tolls and all maintenance responsibilities. This gave the Proprietors a steady income without any of the problems of running the waterway, but it also gave Jones the chance to make a quick profit without bothering too much about repairs, and this, it seems, was what happened. The Proprietors obviously realised that Jones was not keeping his side of the agreement very well, for on 21 May 1825 a resolution was passed at a meeting that Mr. Cubitt should survey the river 'with a view to ascertain how far the lessees have put it in repair'.¹¹ What the result of this survey was is not known, but Jones continued to lease the Navigation, paying £325 each half year. A summary of the

⁹ *Ibid.*, D/DU 73.9; Counsel's opinion on 1780 Act.

¹⁰ *Ibid.*, D/DU 73.10/1/2; 1803 attempt to get Act.

¹¹ Sudbury Archives, Order Book 1824-61, 21/5/1825.

1824-36 accounts shows that receipts varied considerably in this period, from £1589 in 1825 to £624 in 1830 and £1182 in 1835. Of the twelve years' accounts, six show a small loss and only four show a good profit. This wide fluctuation seems at least partly due to Jones' irregular payments: in some years he would pay three lots of rent, in another only one.¹²

In 1835, Jones died, and the Proprietors, meeting on 14 January 1836, resolved 'that the affairs of the river are got into great difficulty in consequence of the late lessee W. Jones not having kept up the repairs' . . . 'It is expedient to get the lease cancelled and the future management of the river into the hands of the Proprietors.'¹³ Legal proceedings were threatened if the lease was not given up. This had the desired effect and so from 1836 the river was taken over entirely by the Proprietors. Whether by coincidence or not, the receipts immediately jumped, from £1,182 in 1835 to £2,782 in 1836, and the balance also increased from £534, a very good year under Jones, to £1,122. In the £2,782 receipts were £1,852 from tolls and £247 from rents on property owned.

The new management immediately set out to remedy the past years of neglect, and Mr. Cubitt was again called for. He was 'to survey the whole line of the Navigation and to make a very full report to the Proprietors, how and in what manner the same may be improved, with reference to the fair interests of the Proprietors and the wants of the commissioners.' Ironically, at this very time when improvements were to be undertaken to bring the Navigation up to its best condition ever, the first mention was heard of the new form of transport that was finally to bring about the end of the waterway. Cubitt was told 'that it be a particular instruction to the surveyor that his attention be drawn to the probability of there being shortly established two lines of Rail Road through Colchester and Bury St. Edmunds to Norwich and Yarmouth, and how they are likely to affect the interests of all parties'.¹⁴ Thus the Proprietors had obviously decided that it would be to their advantage to make the waterway as efficient as possible before the railway was established thus giving them a better chance to retain traffic and effect competition. Two other measures to increase traffic were taken at the same time; half an acre of ground in Sudbury was sold to the Sudbury Gas Company for £100, 'it being deemed beneficial to the Proprietors on account of the probable increase in the consignments of coal and other commodities.' The tolls on timber were cut by one-half, and stone was carried at the 1825 rate.¹⁵ By these actions the

¹² Sudbury Archives, Account Book 1824-36.

¹³ Sudbury Archives, Order Book 1824-61, 14/1/1836.

¹⁴ *Ibid.*, 10/2/1836.

¹⁵ *Ibid.*, 10/5/1836.

Navigation Company had thrown down the gauntlet and shown that they were prepared to fight to retain their traffic.

Cubitt lost no time in completing his work and presented his report in September, 1836. The repairs and improvements that he recommended showed how far Jones had let things slide. Cubitt emphasised this, saying that the Proprietor's interest was to keep the Navigation in as good repair as possible, but the lessees' was to lay out as little money as possible provided the Navigation was kept open. In order to gain the maximum of traffic it was suggested that a fixed journey time was essential, for the present uncertainty of this was the cause of some traffic going by road—a sign that traffic, even before the railway, was subject to some competition. Cubitt thought that with a fixed time of twelve hours downriver and fourteen hours upriver, traffic would no longer be lost. This speeding-up could only be achieved by considerable improvements which would also benefit millers and landowners adjoining the Navigation.

In his improvements, Cubitt recommended the removal of all remaining staunches, a form of flashlock, either by changing the height of existing locks or by building new ones. These new locks would be built in the same way as the existing ones but with better materials and minor detail differences such as larger paddles. The towpath was also in great need of improvement, being either incomplete or in disrepair. Between Sudbury and Cornard, where there were many bends in the river, a cut-off was suggested. At Cornard itself the lock was leaky and water ran off before the lock was full. Henny lock was to be rebuilt altogether, on a new site, and New and Pitmore staunches were to be removed and replaced by a new lock, Pitmore. Bures lock was to be rebuilt on the south side of the present one, thus enabling Potters staunch to go. Wormingford lock was also to be rebuilt, and a new lock, Swan, to be built just downriver, while a canal section between these two would cut out staunches and shoals. Both Wiston and Nayland locks were regarded as satisfactory by Cubitt, but Horkesley lock was in bad condition, as were Boxted, Langham and Stratford locks. A new lock, Palmers, was to be built between Horkesley and Boxted, Dedham was to have a new lock to the north of the present one, and Flatford was to be rebuilt to the south. Finally, at the tidal lock at Brantham, the sills were to be lowered so that boats could get into the waterway even at neap tides.

Altogether Cubitt estimated that the works would cost £12,000, a considerable sum for the Proprietors to pay. Nevertheless, they accepted his report¹⁶ paid him £51 6s for his efforts and in February 1837 announced that works and repairs as recommended by Mr. Cubitt at Wormingford and Horkesley be proceeded with . . .¹⁷

¹⁶ *Ibid.*, 30/9/1836.

¹⁷ *Ibid.*, 23/2/1837.

With this the improvements were authorised, and in May, tenders were advertised for these two new locks. A decision was also taken to build the new lock at Henny.¹⁸ A fortnight later the tender of T. Blunden and S. Wright of Melford and Ipswich was accepted, at £1,800¹⁹ and in June it was decided that £400 was to be laid out for shoaling between Boxted and Horkesley.²⁰ The work proceeded quickly, Horkesley lock being completed by October and Wormingford almost so.²¹ So pleased were the Proprietors with the work²² that when in December Blunden made an offer to rebuild Bures, Dedham and Flatford locks and to build the new cut at Wormingford, they gladly accepted. This expenditure made it necessary to raise extra capital, and to do this, twelve new shares were issued, at £400 each, six in January 1838 and six a year later, thus raising £4,800. The Proprietors also agreed to forego their dividends, as even with the extra share capital the repairs were exhausting the Navigation's resources.²¹

In January 1839, Blunden offered to complete the rest of the works for a sum of £6,925, and this was²³ accepted by the Proprietors. The work progressed and when Cubitt reported three months later, he was pleased with the job done, in general, though he had some reservations over the lock at Wormingford which was 'not yet right'. He again suggested a cut between Sudbury and Cornard, as this did not seem to have been included in Blunden's contract, but nothing was done about this.²⁴ Regarding the completion of the work, nothing is mentioned in the Minute Book, but in the Accounts for 1843 is the comment that the work had been finished, and so it seems that the completion date was sometime in 1842.²⁵

The improvements had a very beneficial effect on the amount of traffic carried. Income from tolls increased from £1,852 in 1836, the last full year before the improvements, to £2,587 in 1839, and to £2,766 in 1842. Thus, even though the improvements must have temporarily affected traffic, more goods were definitely being carried. Profits were good, too, for although over £12,000 was paid out to Blunden from 1837 to 1842, plus the cost of general repairs, dividends were resumed again in 1840 after only two years lapse, and twenty pounds were paid on each share. Income from tolls continued to increase, reaching £3,414 in 1847, and in 1845 the

¹⁸ *Ibid.*, 4/5/1837.

¹⁹ *Ibid.*, 19/5/1837.

²⁰ *Ibid.*, 14/6/1837.

²¹ *Ibid.*, 9/10/1837.

²² *Ibid.*, 22/12/1837.

²³ *Ibid.*, 19/1/1839.

²⁴ *Ibid.*, 5/4/1839.

²⁵ Sudbury Archives, Account Book 1836-68.

dividend payment was thirty pounds a share. This was to be the highest ever paid, a total of £1,800 on the sixty shares. All this was in spite of reductions in toll charges in 1838, 1840 and 1842, thus showing how much traffic had increased.²⁵

Demand for the waterway was such that in November 1842 the Proprietors resolved to meet the inhabitants of Clare with a view to extending the Navigation upriver to that place. In July 1843, having surveyed the route, Cubitt, presented his report, but the cost of £30,000 was too much after having just paid for all the improvements, and the Proprietors resolved 'that further consideration of the matter stand over'.²⁶ Changing fortunes would ensure that the matter was never considered again.

The increasing traffic was no more than the Proprietors deserved. They had brought the Navigation up to first-class standards, and had cut tolls by large amounts, thus creating a real incentive for traffic to use it. From 1843 to 1847 they had their reward—increased traffic, profits and shares—but this reward was to be short-lived, for on 2 July 1849, the railway from Colchester to Sudbury was opened.

The Railway Threat.

The first mention of a railway came in the instructions to Mr. Cubitt when he began his survey in 1836.¹⁴ The line concerned was the Eastern Counties Railway, authorised in 1839 to be built from London to Norwich by way of Colchester and Ipswich, but in fact by 1843 it had only got as far as Colchester, and had terminated there through lack of funds. In its existing form it was hardly a threat to the Navigation, but it was a sign of things to come.

Tolls were reduced and simplified in the six years up to 1842. In April 1838, the first cuts were made, mainly on grain,²⁷ followed by reductions in tolls on iron, slate and stone in January 1840.²⁸ In November 1842 a complete list of toll rates, all reduced, was introduced, and toll stages were grouped, thus cutting down the number of different tolls. Details are given below of the new rates, and the pre-1838 rates, to show the extent of the reductions.

Toll rates: Sudbury, Cornard and Henny, to Mistley.

	1838	1842
20 qtrs. wheat	8/-	4/-
20 qtrs. cloverseed	11/8	4/-
20 qtrs. oats	6/-	2/-
20 qtrs. barley	6/-	3/-
Ton of iron (and lead and slate)	3/-	2/-
Ton of coal: (upstream)		3/6
Load of timber		1/6

²⁶ Sudbury Archives, Order Book 1824-61, 19/11/1842, 11/7/1843.

²⁷ *Ibid.*, 26/4/1838.

²⁸ *Ibid.*, 15/1/1840.

Even before 1838, in May 1836, tolls on timber had been reduced 'one-half', and stone taken 'at the 1825 rate' (presumably lower) (see also p. 230).¹⁵ The toll reductions can therefore fairly be called considerable—and their extent shows what high rates the lessee Jones must have been charging. The reduced rates did not adversely affect the profits of the Navigation, for a thirty pound dividend was being paid in 1845, the highest ever.

The rates shown above were from Sudbury, Cornard and Henny. There were three other toll stages, from Bures and Wormingford, then Wiston, Nayland and Boxted, and finally from Langham, Stratford, Dedham and Flatford.

Thus, in spite of the imminent arrival of a railway, the Navigation prospered and continued to improve. Sudbury, however, seemed to want a railway, and on 30 December 1843 comes the first mention of a line that would serve the town. The minute book states that, 'the treasurer having been served with notice to assent or to dissent from the projected line of railway from the E.C.R. to Bury St. Edmunds—resolved that as far as this company is concerned, they dissent.'²⁹ This was to be a line from either Kelvedon or Chelmsford on the E.C.R. to Thetford, but in spite of a meeting at the Town Hall in 1844, nothing came to this scheme and the waterway gained a brief respite.³⁰

However, Sudbury was not destined to wait long for its railway. On 24th September 1845 the Proprietors were told that, 'it was the intention of certain parties at Colchester to make a railway from there to Sudbury, and they had intimated that they were willing to enter into terms with the Proprietors.'³¹ In response to this, a general meeting was held on October 4, when a committee was appointed to meet the new railway company, the Colchester, Stour Valley, Sudbury and Halstead Railway. (At this same meeting, the £30 dividend was announced, which may have had some effect on later decisions). The committee reported back on the 27th October, saying that they, 'discussed with them (the railway company) the proposition made by them to purchase the interest of the Proprietors in the River Stour Navigation . . . the meeting ended in a wish by the railway company the the River Stour Navigation Company should name the price at which they would dispose of their interest.'³² The meeting resolved that 'the parties present, except Mr. Jones and Mr. Allen' agree 'that the shares of the River be offered to the Railway at £1,000 a share.' Thus it seemed that in spite of the recent improvements and the very profitable state of the Navigation the Proprietors were not prepared to risk railway competition.

²⁹ *Ibid.*, 30/12/1843.

³⁰ Grimwood and Kay, *History of Sudbury*, p. 105.

³¹ Sudbury Archives, Order Book 1824-61, 24/9/1845.

³² *Ibid.*, 27/10/1845.

and would sell out, as so many other waterways did. This, in the long term, would have been to their advantage, but before long the Proprietors had a change of heart, and the Navigation remained in their hands.

On 5th January 1846, it was resolved 'that this Company dissent from the proposed railway.'³³ What caused this change is not known, for the minutes are not very explicit at this point; quite possibly there was considerable friction between the Proprietors at this stage. The change had no effect on the railway, however, for it was authorised by Parliament in July 1846 and construction proceeded. In October the treasurer's report of the Navigation was issued, and in view of the supposed sale of shares to the railway, this was thought to be the final report. Because of this a brief summary was given. Commenting on the shares the treasurer showed how the waterway had prospered in the past few years. Those bought in 1835 had cost between £250 and £300, while now they were selling for £850 which could have been £1,000 without competition. Dividends had also risen from £12 10s in 1835 to £30 in 1845. The treasurer regretted that the sale of shares had not been agreed to by the whole company, although 57 out of 60 had been sold. It was said that 'he [the treasurer] believes that if he and others had not individually concluded a treaty with the Stour Valley Railway it would have been most disastrous to the interests of the Proprietors for there can be no doubt that Canals and Rivers, and more especially the latter, will not be able to contend with the Railway Carriage which in a few years will be the only means of conveyance of goods and passengers throughout the country.'³⁴ He was certainly a man of foresight but his attempts to ensure that all the shares were sold were thwarted. On 30 December 1846 it was announced 'that the Stour Valley Railway, having dissented from the Provisions of the Draft Bill produced at the last meeting as not in conformity with their agreement, which was for the purchase of several shares, the Commissioners do not deem it necessary to make any orders in the matter.'³⁵ With that brief comment, the Proprietors' attempt to sell the Navigation to the Railway was dismissed and from then onwards the Navigation was on its own.

It is not clear why the Railway Company did not buy the Navigation; it appears that as not all the shares were sold the Railway did not want to buy—but it could have had majority control. Perhaps the £60,000 purchase price was too much for the Railway, or was considered too much merely to remove what would be a rather ineffective competitor. At the same time the Navigation may have made things difficult and given the Railway the impression

³³ *Ibid.*, 5/1/1846.

³⁴ *Ibid.*, 12/10/1846.

³⁵ *Ibid.*, 30/12/1846.

that they did not want to sell. Whatever the reason, the Navigation remained in the same hands. The railway, so long a threat, became reality on 2nd July 1849, when it was opened from Marks Tey Junction, five miles south of Colchester on the E.C.R., through Bures to Sudbury.

THE FIGHT TO SURVIVE: 1848-92

The Initial Effects of the Railway.

The Navigation was now facing a fight for its life and was determined to get the first blow in. In April 1848 it was considered advisable, in view of the probable opening of the Witham and Braintree Railway and the operation of the already open Bury and Hadleigh Railways, to lower the price of coal. This was done on 2 June 1848, when the price became 2/- a ton, or 1d per ton per mile. On 22 June 1849, a week before the railway opened, the Proprietors decided 'that if no arrangement can be come to by this Company with the Stour Valley Company before the Railway Company open their line to Sudbury for goods traffic, that the treasurer be empowered to reduce the tolls on coals and slates to the rate of 1/- a ton.'³⁶ The tolls on coal had therefore been cut from 3/6d a ton in pre-railway times to 1/- when the railway was opened—surely a massive incentive for merchants to use the Navigation. Not content with this, however, on 23 July the Proprietors agreed that general tolls could be adjusted 'to meet the circumstances of the times with reference to the railway from Colchester to Sudbury.'³⁷

That these toll reductions were effective in keeping, and even increasing, traffic in the short term cannot be doubted. They were, however, rather drastic, and in spite of the increasing traffic, receipts fell well below their previous level. In 1847 income from tolls totalled £3,414, an all-time peak, but in 1848 this had fallen back to £2,209, and to £1,634 in 1849.³⁸ This fall in income was due solely to toll reductions, not loss of traffic, as the railway was not opened till 1849. When it was opened, it seemed to have little initial effect, and the Navigation's income from tolls remained above £1,400 till 1866. However, the treasurer, in his report on 12 April 1850, was very pessimistic. The toll cuts had led to a fall in income of one-third, he said, whereas the amount of coal carried had increased. A comparison of coal carried was made between the average of the last two years before the railway was opened and the year after, and over the whole Navigation showed an increase from 17,119 tons to 18,560. This was understandable because of the

³⁶ *Ibid.*, 22/6/1849.

³⁷ *Ibid.*, 23/7/1849.

³⁸ Sudbury Archives, Accounts Book 1836-68.

reduced toll rates but the strangest thing was that coal carrying to Sudbury where the railway was open increased by over 2,000 tons, to 13,928 tons, whereas that carried to the intermediate stages where apart from Bures there was no railway fell. Perhaps to try to stop this decline in coal carrying to the intermediate stages along the route the tolls to Nayland, Wiston, Dedham and Stratford were reduced on 5 November 1851.

The treasurer concluded his report with a statement that must have had a devastating effect on the Proprietors, telling them 'I do not think in future we can look to an increase of coal goods, and as to all other goods, the down carriage is now very much down and will probably be nearly annihilated.'³⁹ As there are no trade figures available before 1849, it is impossible to check this statement, but although the treasurer's statement eventually came true it was not till the mid-1860's that traffic really began to decline. In fact most traffic continued to increase until the 1860's before the total finally began to decline.

	<i>Volume of traffic, 1851-66</i>				
	<i>Coal</i> (tons)	<i>Wheat</i> (qtrs.)	<i>Flour</i> (sack)	<i>Malt</i> (qtrs.)	<i>Bricks</i>
1851	17,335	27,993	49,802	15,912	542,000
1852	16,920	23,245	47,381	14,719	882,750
1853	19,068	25,376	46,444	10,640	967,150
1854	21,580	36,845	35,161	12,060	1,206,000
1855	19,591	26,494	40,473	7,184	1,168,200
1856	20,651	26,260	45,829	7,420	1,271,400
1857	22,474	26,606	42,295	8,577	1,498,000
1858	21,908	27,712	51,510	7,253	1,254,450
1859	21,672	29,982	52,489	5,219	2,240,600
1860	22,813	33,346	56,604	6,277	1,834,500
1861	22,707	42,143	55,787	4,046	2,185,300
1862	19,843	43,122	52,467	4,344	2,498,000
1863	19,148	38,951	49,404	2,786	3,157,000
1864	17,591	32,786	42,899	5,080	2,430,000
1865	17,133	28,821	43,902	5,919	2,757,150
1866	13,896	38,127	46,116	4,810	3,243,450

These figures show how traffic kept up during the 1850's and 1860's with only coal showing a serious decline. The agricultural produce very largely remained with the waterway until the final years, but the coal and brick trades were to fall off almost to nothing by then.

In this era of toll reductions one particular increase took place.

³⁹ Sudbury Archives, Order Book 1824-61, 12/4/1850.

The railway company had laid a siding at Cornard, alongside the river, and this was being used as a transshipment point for chalk from the Ballingdon chalk pits, on the opposite side of the river to the railway. The Proprietors were determined that the railway would not make use of the Navigation like that, or if they did then they would have to pay for it. To this end the tolls on chalk and other goods landed at Cornard siding were raised to 3/6d a ton from 1 July 1853.⁴⁰

Thus the initial effect of the opening of the railway was to break the Navigation's virtual monopoly of local transport, and force them to reduce tolls. This, in the short term, caused a general increase in traffic, but coming so soon after the toll reductions of 1838-42, profitability suffered. Probably profits would have dropped as quickly if tolls had not been reduced, for traffic would have deserted the Navigation at a much faster rate than it did. The Proprietors were in a virtually impossible situation, for whatever they did, the Navigation was bound to lose a lot of its trade. Before long, total receipts had fallen to an extent that made proper maintenance difficult, and this helped push the remaining traffic away from the Navigation.

Innovations.

In these years of competition with the railway two attempts were made to improve transportation on the Navigation, one of which was a failure, the other a success. Had they both been a success the Navigation would not have been saved but might have been in existence for some time longer. The first mention of the failure came in November 1860, when a Mr. Inshaw of Birmingham was instructed to 'make an inspection of the river . . . with a view to the introduction of Steam Tugs.'⁴¹ The reason for this was made clear in May 1861, when it was said 'that under the present mode of towing barges by horses, the expense of keeping the towing path in repair is likely to be increased, as the improved drainage of the land causes a more frequent overflow of the water, then this meeting considers that the haulage of boats by steam power would be a great advantage to the Proprietors . . . (resolved) that a proposition be made to the House of R. A. Allen (being the largest boat-owners on the river) to undertake the haulage of their barges by steam power and that a premium be offered as an inducement . . .'⁴² This was a part answer to a letter from R. A. Allen in April of the previous year in which he had complained of the bad state of the towpath. The Proprietors looked into this complaint, found he was right, and ordered immediate repairs—but there were expensive, and in view

⁴⁰ *Ibid.*, 1/7/1853.

⁴¹ *Ibid.*, 14/11/1860.

⁴² *Ibid.*, 17/5/1861.

of the Navigation's economic state the steam barge was an idea that could possibly save a lot of money. Allen, however, was presumably not interested, for the idea of a premium to encourage the use of steam was not mentioned again. Regardless, the Proprietors continued on their own accord. In March, 1862, a model of the steam tug was shown to the Proprietors, but in the following month the whole idea was postponed due to uncertainty and expense, which was £600, 'and doubt of its working so as to accommodate all trades on the river.' It was to be postponed till 'some more fitting opportunity,' and in the meantime a survey was to be made of the steam barges on the Grand Junction Canal.⁴³

The Proprietors took four months to make their minds up. In August it was announced that a steam barge was to be built by Jeffries, Civil Engineer, London. It was to be completed by '25 December next', and to cost £400,⁴⁴ but as soon as April 1863, it was being announced that, 'the steam tug . . . will be launched with steam up in about a week or so.'⁴⁵ This may have been so but by the 14th of October the problems had begun, when the screw and rudder were giving trouble. This, it was hoped, would soon be cured, but by April 1864 the tug was still not right in spite of the screw, boiler and cylinders being altered by a Mr. Salter. There is no mention of who this person is, but he becomes involved with the steam barge from that time until its final demise. Salter explained that on account of the hollow in the stern of the boat no screw would act there, the suction causing a vacuum in the water. He had inspected a variety of screw steam boats, on the Grand Junction, Thames and other rivers, and thought steam paddles, or an independent tug would be best. The result of this was that the cost of alteration was inquired upon.⁴⁶ At this time Mr. Elliston Allen was asked to furnish the amount of expense of working a gang of barges by horse power, in order that the Commissioners might see whether the Proprietors could meet the charge of conveyance by rail. This investigation into the cost of horse power tends to give the impression that the introduction of the steam barge was not expected in the near future, at least not to the extent that steam power would take over completely.

Even though the Proprietors seemed unsure of the usefulness of the barge, Mr. Salter got on with his work and three weeks later came back with a new report. His experiment with the paddles had unfortunately not been a success because of the lack of headroom on the Navigation, but he had a new idea which involved putting in twin screws and altering the shape of the boat. The cost would be in the region of £200-250, and Mr. Salter would do the work

⁴³ Sudbury Archives, Order Book 1861-92, 23/4/1862.

⁴⁴ *Ibid.*, 27/8/1862.

⁴⁵ *Ibid.*, 8/4/1863.

⁴⁶ *Ibid.*, 8/4/1864.

himself.⁴⁷ He proceeded to examine several types of screw, and on 7th of October reported that the barge would be ready in three weeks' time.

Finally, on 1st of December, the barge was announced to be in working order. Salter was told by the Proprietors to make arrangements with Messrs. Catchpool and Thompson of Colchester for a man to be put in charge of the barge, as engineer and driver for one month, and William Blois, presumably a Navigation bargeman, was to navigate the barge. Some success must have been encountered for on 12 January 1865 Mr. Elliston Allen was given free use of the barge for a month to see how it compared with horse travel.⁴⁸ Salter's report on this trial was not decisive, and so another month's free trial was given, this time to Edward Harrison. The report on this trial did not come out till July but when it did the treasurer was instructed to hire or provide three gangs of barges 'for the purpose of testing the capability of traffic on the river in connection with the steam barge.'⁴⁹ It now seemed that the barge was at long last to see regular active service, and it may have done so for a time, for it is not mentioned again till over a year later, in October 1866, when it was to be sent to Nayland for yet another trial.⁵⁰ Again nothing is mentioned for a long while, until in April 1867 an attempt was made to get a Mr. Stannard to take over the barge. The Navigation was to provide its own engineer and steersman, while Stannard would pay the wages and all fuel and repair bills.⁵¹ Unfortunately it seems that this arrangement was not successful for in December 1867, just over four years since the barge first arrived, the Proprietors offered it for sale at a price of £750, obviously having decided that it just was not worth the trouble. Advertisements were to be placed in the *Shipping Gazette*, the *Ipswich Journal* and the *Colchester Gazette*.⁵²

The Proprietors were destined to be no more successful in selling the barge than they were in operating it, for by October 1868 it was still unsold. At this time it was decided to sell it by auction at Ipswich, and advertisements were to be placed in the Yarmouth and Norwich papers to help publicise the event.⁵³ At this, Mr. Salter again intervened, in a seemingly last desperate attempt to get the barge to work. He asked how much rent would be required for one month's trial of the barge 'that he might be satisfied the steamer could do the work.' In answer to this the Proprietors resolved 'that the sale be postponed for the present, and Mr. Salter have permission to use the barge free for two months—as long as he take it to Ipswich docks at the end of that time.'⁵⁴ Nothing unfortunately

⁴⁷ *Ibid.*, 29/4/1864.

⁴⁸ *Ibid.*, 12/1/1865.

⁴⁹ *Ibid.*, 22/7/1865.

⁵⁰ *Ibid.*, 12/10/1866.

⁵¹ *Ibid.*, 26/4/1867.

⁵² *Ibid.*, 18/12/1867.

⁵³ *Ibid.*, 7/10/1868.

⁵⁴ *Ibid.*, 5/11/1868.

came of this final attempt, for by April 1869 the barge was laid up at Pitmore, expenses and 'other arrangements' having prevented its move to Ipswich.⁵⁵

It was destined to stay at Pitmore for over three years, until in October 1872 it was moved to Sudbury. Here at last someone took some interest in it and on 4 February 1873 the Proprietors announced that the barge had been cleaned at Sudbury and sold to Messrs. Freeth for £150. Thus ended the ten-year attempt to introduce steam power to the river. After this failure commercial traffic was destined to remain horsedrawn until the end, thus necessitating the expense of maintaining a towpath.

One disadvantage that steam power would have brought with it, and which the canals suffered from, was that the increased speed of steam barges and the resulting wash, caused erosion of the banks, which led to the channel silting up, and increased dredging bills. Though the Navigation did not suffer so much from this problem as the canals with steam barges, it still had a dredging problem, and sought to deal with this in as effective a way as possible. By the 1870's the river, through lack of proper maintenance, was becoming badly silted in places, and so in May 1879, the Proprietors decided to ask Priestman Brothers to explain the working of their dredging crane.⁵⁶ The explanation must have met with the approval of the Proprietors, and before long they resolved, 'that the treasurer order of Messrs. Priestman one of their Self-Acting Dredging Cranes with grab at the price of £190, delivered at Hull and that he make all necessary arrangements in the matter with them.'⁵⁷ The crane dutifully arrived in August and was put to work. However, in 1880 this 'Hand Dredger' was offered back to Priestman's for £170 (they had offered £150) in part exchange for a steam dredger.⁵⁸ This was given a trial later in the year, and its success led to the Proprietors buying it, at a cost of £606. It soon removed the deposits from the basin at Sudbury, and the cutting to the gas works, and in 1881 the treasurer reported that the dredger, 'works wonderfully well . . . [It] would have been impossible under the old system to have done the work . . . without stopping the trade for about three months at the busiest time of the year.'⁵⁹ Thus at least from this attempt to improve the Navigation the Proprietors received value for money. The dredger presumably continued to give good service, for it is rarely mentioned again. It was occasionally hired out to other people, for in 1887 'the Zeolinite Company of Manningtree' used it, and in 1889 permission to use it below Mistley was refused because of the need of an extension from the Board of Trade.⁶⁰ It was finally

⁵⁵ *Ibid.*, 29/4/1869.

⁵⁶ *Ibid.*, 9/5/1879.

⁵⁷ *Ibid.*, 21/5/1879.

⁵⁸ *Ibid.*, 4/4/1880.

⁵⁹ *Ibid.*, 21/10/1887.

⁶⁰ *Ibid.*, 8/2/1889.

decided to dispose of it in 1908, but at the time of this decision there were no offers for it and what actually happened is not mentioned in the minutes. It would seem certain that by then the useful life of the dredger was over, but in the twenty-eight years it had spent on the Navigation there is no doubt that it had been a great success.

Decline.

Successful steam power and dredging operations might have made the Navigation more efficient in the short term, but its final collapse was almost inevitable as the railway system quickly covered the entire country, and became the accepted form of transport for trade. The waterway, with its indirect route to London, and the need for transshipment at Mistley, was considerably slower than the railway, and as soon as a country-wide rail network was built, goods could go directly to their destination without any transshipment. The Navigation, isolated from the rest of English waterways, could only continue to send goods out to the coast to be taken down to the Thames and then perhaps to be transhipped again to reach their final destination. Only if the Navigation had handled a large trade of exports and imports, via the ports of Mistley or Harwich, could it have hoped to continue. The foreign trade that did exist, the importing of wheat, was probably hampered by the agricultural depression in the late 19th Century. Internal trade was bound to be lost to the railways.

Cubitt's improvements to the Navigation had meant that no large scale repairs were necessary for some years after 1840 and thus initially the toll reductions and the consequent fall in profits caused few real problems. A sign of things to come, however, was the drop in dividends, from the peak of £30 a share in 1845 to £20 in 1846 and £15 in 1849. At first this seemed to be merely an adjustment to stable conditions after the improvements, toll reductions and railway scare, and £15 remained the dividend until 1858. In that year it fell to £7 10s and though in 1859 it rose to £15 again, this was to be the last time, for it never again exceeded £10 a share.⁶¹

The first mention of repairs after Cubitt's improvements was in 1855 when the treasurer in his annual report remarked that repairs were becoming due.⁶² Nothing more was mentioned until 1859, when the necessity to do something was now pressing, and it was decided that 'such works as are actually necessary be proceeded with.'⁶³ This policy remained in force right through to the winding up of the Navigation, understandably perhaps, because the Proprietors must have known that any large expenditure would never be

⁶¹ Sudbury Archives, Order Book 1824-61 and Account Book 1836-68.

⁶² Sudbury Archives, Order Book 1824-61, 4/5/1855.

⁶³ *Ibid.*, 18/3/1859.

regained. Even so, the lack of expenditure, however understandable, led to a decline in efficiency with frequent bursts and traffic hold-ups. This tended to force the remaining traffic off the Navigation. The Proprietors were faced by a vicious circle of rail competition, leading to falling receipts, which in turn led to decreased maintenance, to the detriment of the remaining traffic.

By 1861, 'Harris the Riverman' was reporting 'that the tail parts of the locks and foundations in most of the locks want repair'⁶⁴ and as at this time rail competition became really severe, the problem grew worse. The railway from London to Colchester had now been extended through Ardleigh and Manningtree to Ipswich and a branch line opened to Mistley and Harwich, effectively allowing the railway to compete for traffic at both ends of the Navigation. Even intermediate traffic suffered, for in 1867 tolls on coal to Dedham and Stratford were cut because of rail competition from Ardleigh.⁶⁵ It was obviously becoming more convenient to send coal to that station and then carry it by road for the remaining few miles, than to send it all the way by water. The railway was, after 1862, a more formidable competitor than ever, for the E.C.R. and other local companies had joined up to form the Great Eastern Railway, which operated all over East Anglia and was considerably more efficient than its predecessors.

The 1860's saw a serious decline in traffic and profitability. Dividends tumbled from £15 in 1859 to a low of £2 in 1867, and traffic of all kinds began to decline, bricks being the last, after 1866. Till the end, flour and wheat traffic remained steady, but this could not compensate for the decline in everything else. In 1869 the poor maintenance of the past twenty years was really telling, and Samford Hundred magistrates decided to look into the state of the works probably because of the bad state of the bridges. In this year no dividend was given in view of the expensive repairs that were now due and also because the increased rail competition was causing a diminution of trade.⁶⁶ At last something was decided upon and in 1870 Salter offered to inspect the river as the Navigation could afford no proper surveyor and his offer was gladly accepted. He was to be assisted in his work by 'Harrison the Riverman' (not Harris, as before, but actually the same man).⁶⁷

By the 12 of October they had finished their survey and Salter presented his report. This showed considerable repairs were needed on all locks to a total sum of £721. He suggested removing Horkesley lock and deepening the river, and also that future repairs should be

⁶⁴ Sudbury Archives, Order Book 1861-92, 10/10/1861.

⁶⁵ *Ibid.*, 18/12/1867.

⁶⁶ *Ibid.*, 13/10/1869.

⁶⁷ *Ibid.*, 27/4/1870.

more substantial. The present repairs were merely 'patchwork' and were not lasting. These major repairs to locks were needed as well as general repairs but could be done over a period of time, according to Salter, and this was certainly to be the case. At the meeting where the report was given it was resolved to repair Boxted, Dedham and Langham locks, and to make no permanent repairs to Horkesley.⁶⁸ A year later Cornard and Dedham had been seen to and a year later still the Boxted repairs had been carried out. Traffic was by now seriously declining and this decline was being hastened by the increasing number of closures of the Navigation. In the 1876 treasurer's report the fall in tolls was blamed on closures which had occurred for various reasons; several weeks of flooding in winter, a fortnight in the autumn because the tail lock had 'blown' at Brantham, a fortnight in March because of a breached wall at the same place and a month in the summer while Henny and Pitmore locks were repaired. Brantham was giving much trouble because being tidal the lock was under much greater strain than the others and was expensive to repair. The policy of the past twenty years was now beginning to tell; everything appeared to be collapsing at once. Even so, after all the closures and repairs a £3 dividend was paid.⁶⁹

In spite of the repairs taking place after the survey by Salter, the Commissioners were also becoming worried by the condition of the waterway. It was their job to look after the interests of the local people as well as the Proprietors, and so in August 1880 an inspection was made. The report following this inspection commented on the general condition of the waterway and gave the definite impression that a decline was setting in, judging by the general need of repair. The report comments 'we noticed lock gates and wings generally out of repair,' and goes on to give specific details which showed that in spite of the work recently done on the Navigation, much was still wrong.⁷⁰ However, in 1882 the Proprietors received 30/- dividend, stated that repairs to Dedham and Flatford locks would be done in the following year, and that when they were done the river would be in a better condition than it had been for the past twenty-five years.⁷¹ This is not really surprising, for no proper repairs except this last batch had been undertaken since those in 1840. Another factor in this improvement was the dredger which was put to work at this time to clear the accumulated silt from the river.

The Navigation may have been in better condition than for the past twenty-five years but still traffic continued to decline and in

⁶⁸ *Ibid.*, 12/10/1870.

⁶⁹ *Ibid.*, 27/10/1876

⁷⁰ Commissioners' Report on Stour Navigation, 1880.

⁷¹ Sudbury Archives, Order Book 1861-92 24/10/1882.

1881 there was no dividend because of the expense of buying the dredger and because floods had caused a drop in tolls. To offset this further loss 3d was added to tolls on coal from Mistley to Flatford, Dedham, Langham and Nayland, from February 1882.⁷² This higher rate did not last very long, for in April it was decided to rescind the increase and to talk the whole toll structure over with Messrs. Stannard and Clover—presumably those most affected.⁷³ The new toll structure, published a month later, showed that there were three main localities of trade on the river. The first was from Sudbury to Mistley, involving bricks and malt downstream, and coal, maize and barley upstream. Of this, the coal trade had fallen off because of the demand for cheap Midland coal which came by rail, but maize was increasing. The second locality was from Nayland and Wiston to Mistley, with flour going downstream to London and coal and foreign wheat returning. The third locality, from Stratford and Dedham to Mistley, was similar to the second. There was a little intermediate traffic, mostly wheat from Sudbury to Nayland. To cater for these different kinds of traffic there were to be 'A' and 'B' tolls, 'A' being from Mistley to some stage on the Navigation and 'B' for intermediate places only. The new tolls were generally lower, cereals in particular costing less.⁷⁴ When this new toll structure was published the treasurer reported that although at that time the entire trade of heavy goods went by rail, a steamer now operated from London to Mistley and it was hoped that the bargemen could build up a trade in 'heavies'. This turned out to be a vain hope.

Either because of these reduced toll rates or a further decrease of traffic or a combination of both, income from tolls fell from £840 in 1882 to £673 in 1883. By 1886 this figure was down to £560 and there were only three users of the river, Messrs. Allen, Stannard and Clover. The main decrease in tolls, the treasurer stated in October 1886, was because the brick trade was declining. This was due to 'the opening up all around London of Suburban Railway Stations to which bricks may now be sent direct at a far cheaper rate when the carriage from the wharves in the River Thames is taken into consideration. By means of the East London Railway under the Thames at the old Thames Tunnel, Bricks are now sent direct to the South of London, which formerly all went by water to Angerstein's wharf, and were transhipped there for delivery by rail.'

He then moved from bricks to cereals. 'Trade in corn and flour is about the same. Every effort has been made by your treasurer to develop the trade in corn from London, but the competition from the railway is very severe, and traders who bring corn by rail from

⁷² *Ibid.*, 3/2/1882.

⁷³ *Ibid.*, 14/4/1882.

⁷⁴ *Ibid.*, 12/5/1882.

London have this advantage—they can bring one truckload at a time as they want it, while by water from London they must bring a full barge load of fifty tons at least in order to get a reduced rate.⁷⁵ The waterways found themselves in unequal competition with a far more flexible means of transport and the rural waterways in particular had no more chance of success against the railways than the rural railways had later when road services developed.

This rail competition initially mainly affected the trade to Sudbury but by 1890 a further decrease in tolls was blamed on a falling off in trade in the lower parts of the river—which meant that either some trade had ceased altogether or was going by road to the nearest railhead.⁷⁶ This showed how favourably the traders regarded the railway by now and in comparison, the Navigation had virtually ceased to exist as a serious means of transport as far as most people were concerned.

The Proprietors must have realised this fact, and when a Mr. H. A. Leverett of Temple, London, asked if they would sell their shares they gladly agreed.⁷⁷ They asked £100 a share which was a considerable drop on the £850 selling price in 1846, but even so, considering the state of the Navigation, still a high figure. Who this Mr. Leverett was and what he intended to do if he got control of the Navigation is not known, but the offer eventually fell through and the Navigation remained in the same hands. The failure to sell was announced at the 1889 meeting of the Proprietors when it was stated that 'negotiations for the sale of the river have fallen through.' The treasurer went on to say 'though I think eventually some plan may be developed for connecting the River Stour with the Rivers Ouse and Cam, thus giving a means of water carriage to the North of England.'⁷⁸ This idea of linking the East Coast rivers with the Midlands and North has been suggested many times, even in recent years. The technical problems would certainly not be great as the Stour Valley climbs into Cambridgeshire and the tributaries of the Cam rise close by, but it seems very doubtful that this development would have saved the Navigation in 1889. The railways already had an efficient link from the Eastern Counties to the Midlands and North and it would have been rash indeed for a canal company to try to compete with this, even if the large capital outlay could have been raised. However, had the idea come a hundred years earlier, it quite possibly would have been a success and would have given the Stour Navigation a much better chance of survival.

Having lost their chance to sell the Navigation, the Proprietors then ran into trouble with the Board of Trade. The 1888 Railway and Canal Traffic Act meant that the existing tolls on the waterway

⁷⁵ *Ibid.*, 22/10/1886.

⁷⁶ *Ibid.*, 31/10/1890.

⁷⁷ *Ibid.*, 16/10/1888.

⁷⁸ *Ibid.*, 24/10/1889.

had to be discontinued and revised rates were to be worked out. In October 1889 it was considered reasonable to ask for the maximum tolls possible but not to charge them unless really necessary.⁷⁸ Nothing more was done about this and in April 1891 an extension was gained from the Board of Trade for more time to work the tolls out, but this had to be paid for and was expensive for the Navigation. Not till April 1894 were the new toll rates finally worked out; ironically, these rates were the same as before.

1892 was an eventful year for the Navigation, for it made its first loss, of £64 9s 6d, and became a limited company.⁷⁹ Tolls were still amounting to over £500 a year, but expenses were mounting and the last dividend, of 30/-, was paid in 1891. Brantham lock continued to give trouble and in August repairs were authorised because it had become impassable except at high tide.⁸⁰ These repairs cost £300, and in October £250 was borrowed from the bank to make up for losses.⁸¹ The Proprietors must have realised that the end was near and passed a resolution 'that an approach be made to the Board of Trade for a warrant of abandonment under the Railway and Canal Traffic Act of 1888 with a view of winding up the old undertaking under section 199 of the Companies Act 1862 and the formation of a new company under the provisions of the said Act.'⁸⁰ This did the Proprietors no good, for two months later they were told by Mr. Courtney Boyle of the Board of Trade that no warrant of abandonment would be passed unless the 'canal' had ceased to be worked for three years.⁸¹ This being so, consultation took place to see whether the Company should go Limited Liability—a sensible step in view of the likely losses to come—and shortly afterwards a resolution was passed, 'that the Company be incorporated under the Companies Acts 1862-90 as a Company limited by shares; and that its name be changed to The River Stour Navigation Company Limited.'⁸² Thus in the year of its first serious loss, The River Stour Navigation Company ended its 187 years existence, and the new Limited Company began its short 21-year span.

*Volume of traffic, 1867-1895*⁸³

<i>Agricultural produce</i>	<i>Wheat</i>	<i>Flour</i>	<i>Malt</i>	<i>Barley/Oats</i>
	(qtrs.)	(sacks)	(qtrs.)	(qtrs.)
1867	26,983	52,573	4,580	4,736
1868	27,747	61,382	2,884	1,133

⁷⁹ Sudbury Archives, Account Book 1868-1936.

⁸⁰ Sudbury Archives, Order Book 1861-92, 2/8/1892.

⁸¹ *Ibid.*, 25/10/1892.

⁸² *Ibid.*, 15/11/1892.

⁸³ 1871, 1891 and 1892 figures are missing. The table is taken up to 1895 because in that year all carrying was converted to tons.

*Volume of traffic, 1867-1895 (continued)**Agricultural produce*

	<i>Wheat</i>	<i>Flour</i>	<i>Malt</i>	<i>Barley Oats</i>
1869	16,319	49,696	4,657	9,251
1870	25,919	61,276	4,650	3,124
1872	19,269	36,633	9,297	4,292
1873	24,156	48,134	10,541	5,674
1874	15,854	37,470	11,913	2,920
1875	14,064	35,399	15,114	7,410
1876	18,961	33,276	10,613	3,051
1877	19,032	36,671	11,113	11,521
1878	18,265	25,722	9,149	13,030
1879	14,409	29,241	9,355	9,744
				(plus maize)
1880	19,082	33,547	10,126	14,678
1881	15,959	30,297	10,143	9,253
1882	18,553	34,908	13,960	7,654
1883	20,449	36,158	8,635	3,876
1884	16,551	35,292	10,228	3,710
1885	10,834	30,232	13,400	10,006
1886	12,550	27,090	9,475	5,774
1887	14,030	32,354	10,737	4,328
1888	11,894	32,707	10,370	11,888
1889	22,088	35,730	7,586	14,680
1890	17,575	27,503	11,229	8,003
1893	15,663	19,392	8,550	10,823
1894	25,116	30,292	8,770	20,918
1895	24,627	29,663	3,550	9,423

Other produce

	<i>Coal</i> (tons)	<i>Bricks</i> (nos.)	<i>Oil</i> (barrels)	<i>Sundries</i> (tons)
1867	10,769	3,091,500		
1868	7,583	3,007,500		
1869	8,092	2,273,500		
1870	8,424	2,456,800		
1872	9,387	2,606,000		
1873	7,121	2,647,500		
1874	6,419	3,020,900		
1875	6,017	2,438,500		
1876	5,814	2,677,500		
1877	5,800	2,503,900		
1878	5,802	3,020,280		
1879	6,237	2,584,800		
1880	6,421	2,540,000	1,225	92
1881	5,764	1,793,000	800	152

*Volume of traffic, 1867-1895 (continued)**Other produce*

	<i>Coal</i> (tons)	<i>Bricks</i> (nos.)	<i>Oil</i> (barrels)	<i>Sundries</i> (tons)
1882	6,552	2,248,000	1,500	385
1883	4,758	2,071,000	850	501
1884	2,910	1,904,000	830	284
1885	4,173	1,700,000	1,298	190
1886	4,740	1,198,000	2,302	281
1887	5,035	1,021,000	1,993	619
1888	4,968	1,253,000	2,140	1,159
1889	4,769	861,000	3,484	1,427
1890	3,893	932,000	2,578	1,036
1893	4,129	744,000	4,096	716
1894	4,707	712,000	3,276	1,482
1895	5,120	811,000	3,592	1,729

Coal and bricks show a continual downward trend, compared with the fluctuating but generally steady agricultural traffic.

THE LAST YEARS, 1892-1913

The financial state of the Navigation in its last years was worsened considerably by external influences beyond its control and by poor maintenance finally making its mark. These two 'last straws' almost certainly caused the closure of the Navigation some years before it would have occurred otherwise.

At first the Limited Company seemed to have a not too dismal future before it. In October 1893 at a shareholders meeting, an increase in tolls was announced, caused mainly by an increase in the amount of foreign wheat carried. There was still a deficit, but this was slightly less than the year before.⁸⁴ This trend continued and by April 1894 the deficit was further reduced to a mere £21 15s. Tolls in this year amounted to £731, the highest figure since 1882 and one never to be reached again. They fell in the following year to £551,⁸⁵ and the reason for this was given by the Managing Director in October 1895. He reported that there was 'a great falling off in the trade of the river, [and] the principal cause of this is the failure of Mr. Jeremiah Stannard of Nayland Mill, which has been closed since last May, and it does not appear likely that it will be reopened.'⁸⁶ Mr. Stannard had been one of the only three or four users of the Navigation, so the effect of this bankruptcy on the amount of trade carried was quite considerable. In 1899 it was said that the closure had made £200 difference in tolls each year.⁸⁷

⁸⁴ Sudbury Archives, Order Book 1892-1937, 3/10/93.

⁸⁵ Sudbury Archives, Account Book 1868-1936.

⁸⁶ Sudbury Archives, Order Book 1892-1937, 31/10/95.

⁸⁷ *Ibid.*, 31/10/99.

This bankruptcy was not the first drawback in 1895 for in the early part of the year the river had been closed for eight weeks by frost. This had not only cut trade, but when the thaw came the river banks had been damaged by the resulting floods.⁸⁸ Tolls kept above £600 from 1896 to 1899 but between 1900 and 1901 fell from £519 to £386; this was blamed on a drought which had caused barges to take twice as long as usual to cover their journeys. This had the unfortunate effect of encouraging the already declining brick and malt trade to go by rail; brick tonnage plummeted from 2,811 in 1899 to 879 in 1902, malt from 906 to 420 tons, and they both continued to fall.⁸⁹ In 1903, having already suffered from frost and drought, the Navigation was affected by floods, which stopped the barges altogether for some time.⁹⁰ Thus, in these already difficult years, the Navigation's plight was made worse by the combination of a bankruptcy and adverse weather conditions.

Disrepair was by now a very serious problem, for little had been done since the batch of repairs in the 1870's. The bridges over the Navigation were the first to give trouble, and caused considerable expense. Ironically the bad conditions of the bridges was at least partly due to the increased road traffic to Colchester, which had grown rapidly since the coming of the railway. Boxted bridge was first mentioned, in January 1895, when a petition was sent to West Suffolk and Essex County Councils asking them to 'fix up a new one.' The Company offered £100 towards the cost if the Counties took over the bridge.⁹¹ In October the Managing Director stated that 'Boxted and Wormingford bridges must be repaired,'⁹² and this became obvious when, in the winter of 1895/6, Wormingford bridge fell in and had to be rebuilt.⁹² Soon afterwards the problem of Boxted bridge was solved and West Suffolk and Essex County Councils took over the bridge, the Navigation giving £50 to each Council. Dedham bridge was next to give trouble, and here the Navigation had a greater price to pay, probably because it was a bigger bridge than that at Boxted. In October 1897 £200 was offered as a contribution towards a new bridge,⁹³ but a year later the East Suffolk County Council was refusing to rebuild it, even though the bridge was closed by now.⁹⁴ This situation could not remain for long, and local pressure built up. The Navigation entered into talks with East Suffolk and Essex County Councils, and increased its offer to £250. This later became £300, and with a further £100 from local subscriptions, the Counties at last agreed to take the bridge over.

The Navigation's problems were far from over. The bridges, at

⁸⁸ *Ibid.*, 26/4/95.

⁸⁹ *Ibid.*, 31/10/1901.

⁹⁰ *Ibid.*, 31/10/1903.

⁹¹ *Ibid.*, 19/1/1895.

⁹² *Ibid.*, 30/4/1896.

⁹³ *Ibid.*, 29/10/1897.

⁹⁴ *Ibid.*, 27/10/1898.

least, had not affected traffic but in January 1896 a serious breach occurred at the old Wormingford Lock and was aggravated by floods. Mr. F. Whitmore, engineer of the Chelmer Navigation Company, was asked to help and a month later a dam had been erected in front of the breach so that the damage could be seen.⁹⁵ By April the damage had been repaired but five valuable weeks had been lost to traffic by the breach. The directors did not think that they were responsible for repairs to this old lock and so wrote to the old millowner to see if he was responsible. Dealing with his trustees, £300 was eventually gained, but then the owner had no further liability in the matter.⁹⁶ At least over those repairs the Navigation was not greatly out of pocket. Wormingford continued to give trouble for in April 1897 before the previous matter had been settled, a survey was made of the floodgates there.⁹⁶ Eighteen months later the gates seem to have been replaced at a cost of £600 and the responsibility for them was in future to rest with the present mill-owner. This was a large item of expenditure for the Navigation but it seems that they had no choice if the river was to be kept navigable.

Repairs then ceased to be a major problem until 1905, but the deficit had increased alarmingly since 1897 when a profit of £12 had been made. In 1904 the deficit rose to £425 and was £421 in the following year. This kind of loss was impossible to bear for long, and the Company had to resort to overdrafts and mortgages. In 1903 the forms of indenture had to be deposited with the deeds of Nonsuch Meadow at the bank as security for the overdraft,⁹⁷ and in 1909 the personal guarantee of the directors was required for another, presumably bigger, overdraft. By 1911 the mortgage was £1,100, and although losses were slightly smaller, even a small profit being made in 1909 and 1911, there was no likelihood of the accumulated deficit ever being paid off.⁹⁸

From 1908 onwards, in spite of the deficit, certain repairs had to be made to keep the waterway open. In April of that year Brantham lock had to be concreted on the floor to stop leakage⁹⁹ and in July a burst at Stratford made a new lock bed essential there also.¹⁰⁰ A mortgage had to be taken out to pay for repairs to these two locks, and no sooner had these been repaired when Flatford lock burst. In May 1909 it was announced that Fenton and Company were to do the repairs, as they had already done Brantham and Stratford.¹⁰¹ To round off these years of misfortune, in 1911 it was found that Dedham lock needed a new concrete floor.¹⁰²

⁹⁵ *Ibid.*, Jan/Feb/1896.

⁹⁷ *Ibid.*, 4/6/1903.

⁹⁶ *Ibid.*, 29/4/1879.

⁹⁸ *Ibid.*, 14/1/1909.

⁹⁹ Sudbury Archives Order Book 1892-1937, 30/4/1908.

¹⁰⁰ *Ibid.*, 17/7/1908.

¹⁰¹ *Ibid.*, 29/5/1909.

¹⁰² *Ibid.*, 27/4/1911.

Since 1908 the Navigation had seen only very small losses or even small profits on operations, but these continual heavy repairs were too much to bear for the Company with its already large overdraft. Traffic had fallen from 20,000 tons annually in 1896 to only 10,662 in 1911, and though wheat, stone and coal remained fairly steady traffics, the trend was continually downwards. 10,000 tons a year is only 200 tons a week, perhaps ten barges—hardly a viable proposition. The Directors came to the obvious conclusion. After finding in 1912 from the Board of Trade that no grant was available from the Development Commission unless the canal was run by a non-profit making body¹⁰³ they resolved to sell off the remaining real estate, though much had already gone, to pay off the mortgage, and then in July 1913 decided, 'that in view of the present financial position of the Company, an Extraordinary General Meeting of the shareholders be called . . . to consider the winding up of the Company.' 'All public bodies in the neighbourhood (were) to be advised of the Company's situation.'¹⁰⁴ On 18th September 1913, at the Extraordinary General Meeting this resolution was carried by the shareholders; the River Stour Navigation Company Limited went into voluntary liquidation, 208 years after its initial Act had been passed. An era had passed in the transport history of this part of the country.

CONCLUSION

1913-1937.

The voluntary liquidation was not quite the end of the story, for some of the shareholders later applied for a stay of the Order for winding up and formed themselves into a Trust Company.¹⁰⁵ At Colchester in December 1913 Messrs. Johnson and Robins, Civil Engineers of Boston, were asked to give an estimate for saving the river and in July 1914 said it could be done for £250,000. This was more than could be afforded so the best scheme available for £60,000 was asked for. When these new plans came through they were recommended by the committee, but nothing resulted from this; the onset of the 1914 war presumably stopped anything being done.¹⁰⁶ A few barges continued to use the Navigation and it seems that the last barge reached Sudbury in 1914. Mr. Waller, in his book on the Suffolk Stour, believes that the last barge went through Boxted lock in 1916, but the lower reaches of the river were used till much later. In 1918 tolls of £12 were paid, by Mr. Percy Clover of Dedham Mill, and it seems that he used the river sporadically throughout the 1920's, for the last payment of tolls, £1 13s, was in 1931, presumably for the previous year. Mr. Clover was chairman of the Trust Com-

¹⁰³ *Ibid.*, 1/2/1912.

¹⁰⁴ *Ibid.*, 17/7/1913.

¹⁰⁵ Waller, *op. cit.* in note 3, p. 17.

¹⁰⁶ Grimwood and Kay, *op. cit.* in note 30, p. 105.

pany, perhaps the reason why he still used the Navigation a little, though most traffic to the mill must by then have come by road, as it still does. All the barges, except Clover's, were sunk in the basin at the quay at Sudbury or in the cutting to Ballingdon Grove in 1914, and lay there rotting for many years. Clover's barges ended their lives on the bank at Dedham and were the subject of a painting by Sir Alfred Munnings in the 1930's.

In 1928 an Act was passed allowing the South Essex Waterworks Company to take water from the Stour at Langham and Stratford and in this Act the Water Company agreed with the Navigation Trust Company to rebuild Stratford, Dedham, Flatford and Brantham locks at a cost of £5,000 each. Though these locks were rebuilt, Langham lock had been removed by the Water Company, so there was no possibility of reviving traffic from Sudbury. Even Clover's traffic had ceased in the lower reaches and the new locks, it seemed were never used for commercial traffic. By 1935, there no longer being even any pretence of traffic on the river, an application was made to the Registrar of Joint Stock Companies for the Navigation to be struck off the roll as it no longer carried on the business for which it was formed. In 1937 this application became effective and the ghost of the old Navigation was finally laid.

The Present.

Today, forty years after the last barges ceased to move, there is very little still remaining of the old Navigation, for between Sudbury and Stratford the river has been straightened and deepened to allow better drainage. Nearly all the locks beyond Dedham have been removed and replaced by weirs, the only exception, it seems, being Pitmore. Even here, little more than the lock chamber and the old wooden archway that went over the lock gates are left. Sudbury Quay basin is almost completely filled in but a 1791 warehouse still exists to show the original importance of the Navigation to the town, and the Gas Board still uses premises adjacent to the old gasworks. basin, although the old buildings there have recently been demolished.

At Stratford the lock built in 1933 has been removed but Dedham, Flatford and Brantham locks still exist. Flatford was built in exactly the same style as the old lock, with wooden arches over the lock gates, presumably to retain the scene as it was in John Constable's time. These three locks, though fairly modern, remain as fairly dilapidated memorials to the Navigation, more or less intact but unusable because wooden staunches have been built in front of them to keep the water pressure off. Brantham, in marshland, has recently had a temporary road bridge built over it to allow access to a small island for tipping lorries.

In the late 1960's, the last craft up to Flatford from the open river

navigated through Brantham lock at high tide—and with great difficulty. This was definitely the last vessel to use the Navigation from the tidal river, for a barrage is now being built across the river between Brantham and Manningtree, and this will block access to the river by anything other than very small boats. The River Stour Trust, a society which has in the past attempted to get the Essex River Authority (now the controller of the river) to reopen the locks did succeed in getting boat rollers put over the barrage and in future they will be placed over other obstructions in the river. At present, apart from the occasional canoeist, the only boats to ply the river are the rowing boats from Dedham to Flatford, very popular with tourists in the summer. It seems sad that the locks at these two places could not be repaired and reopened, to allow small boats to travel the few miles of beautiful countryside between Stratford and Brantham, and thus to create a living memorial to the River Stour Navigation.

This, then, is the history of the River Stour Navigation, a waterway that helped an area of the country to prosper, and then was forgotten by that area when more efficient forms of transport appeared. It was never an important waterway in comparison with the Aire and Calder or Grand Junction, but nevertheless played an impressive role in transporting goods from East Anglia to London, and allowed local tradesmen and farmers to widen their markets.

In its monopoly years the Navigation showed itself ready to improve and cut rates. In its years of competition, it was eventually beaten by the more flexible railway, and then perhaps finished off by the introduction of road lorries, but it did not go down without a fight. The ghosts of the old Proprietors now smile down on the weed-covered site that was once the railway yard at Sudbury; times have moved on, and an even later phase of local transport has passed since that of the Navigation.

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