THE TRADE AND SHIPPING OF EIGHTEENTH-CENTURY HULL

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EAST YORKSHIRE LOCAL HISTORY SOCIETY 1975

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PREFACE

The 18th century was only a chapter—albeit an important one-in Hull's long trading history, and in normal circumstances a pamphlet dealing with such a short period would be expected to provide at least a brief survey of the events before and after that period. Fortunately the years prior to 1700 were surveyed in an earlier pamphlet in this series by Professor Ralph Davis (Number 17, 1964), and those after 1800 by Dr. Joyee Bellamy (Number 27, 1971). Falling as it does between these earlier works, the present study omits lengthy digressions backwards or forwards. Ideally the three pamphlets should be read together. Professor Davis has shown how Hull's trade grew in early modern times, and how the town was chiefly involved in trade with northern Europe. The present work shows how that trade expanded within a fairly limited area as the Industrial Revolution took hold of the hinterland. Despite attempts at diversification, Hull remained ehiefly a northern European trader until changes began to take place in the direction of trade in the period surveyed by Dr. Bellamy. Nevertbeless, the developments in both foreign and domestic trade, and in merchanting and shipping, in the 18th century were complex, and it is impossible within so short a span to do anything more than generalise about the economy and hope that readers interested in topics which receive only cursory mention will pursue them further in the Victoria County History of Hull, or in my Hull in the Eighteenth Century.

No work of local history can proceed without the assistance of many people. In particular I should like ro thank the staff of the Hull Local History Library, the Corporation Archives Office, Wilberforce House, the Registry of Shipping, Hull, and the Custom House Library, London, who have been most kind and helpful to me over the years. I am grateful also to the managers of the chief offices of the National Westminster Bank and Barclay's Bank in Hull, to the late Mr. G. D. Lloyd, sometime docks engineer at Hull, to Baron Duckham, Norman Higson, Ralph Davis, Joyce Bellamy and Keith Allison, and to the late Ken MaeMahon, to whom all local historians in Hull and the Riding owe a great debt.

THE TOWN IN THE EARLY EIGHTEENTH CENTURY

Anyone in the early 18th century who approached Hull across the flat and flooded plains of the East Riding might be forgiven for believing that he had reached a great metropolis of trade. After mile upon mile of pastoral emptiness he saw before him the massive encircling walls, which had so recently kept out a king but which now only partially hid the serried ranks of sharp-pitched gables over which the huge parish church towered like some continental cathedral. Beyond the town could be seen the bobbing grey-white sails of vessels in the river Humber, at the beginning or end of their adventure. 'The royal and beautiful town of Kingston-upon-Hull' was the sub-title chosen by the historian T. Gent for his Annales Regioduni Hullini in 1735. Beautiful is not the most common adjective used to describe Hull, and the cynic will no doubt say that Gent wanted to sell his book and that the easiest way to sell the old local histories was to shower indiscriminate praise on everything in sight, as both Hadley and Tickell tended to do at the end of the century. But Gent was probably not so far out. To those for whom beautiful is a synonym for medieval, Hull would be a picturesque place, with enough new building to improve it and not enough to ruin it. There were still gardens inside the walls, while the Corporation's rubbish tips were outside the rown; and the streets, though narrow, were well paved—except when workmen had them up to attend to the sewers or the water pipes.

The town was also medieval in its smallness. In no more than ten minutes our visitor could saunter from the main entrance at Beverley Gate through the street ealled Whitefriargate, past the old Trinity House (headquarters of the charitable guild that still eontrolled seamen's conditions of service and collected their superannuation money) and into the market place, where the 'shambles' were shaded by Holy Trinity ehureh and Defoe found 'an infinite plenty of all sorts of provisions'. On all sides the streets and alleys were thronged with people coming and going about their business, with market produce on their country carts, or merchandise on the smooth-running sledges used at the riverside. Strolling southwards, past the old town hall, he would reach the sea wall in two or three minutes, and from there he could return along High Street, the commercial centre of the town, where the richer merchants lived with their houses facing the street and their warehouses at the back facing the river Hull. Here stood the exchange, a handsome piazza containing the custom house, the Corporation's 'weigh house' where tolls were collected, and, till 1705, the Corporation armoury. Defoe found the exchange 'wonderfully filled, and that with a confluence of real merchants, and many

foreigners, and several from the country'.

By all accounts the town was bursting with activity; 'a town of' very considerable trade', as another visitor put it in 1717, impressed both by the multitude of people and by the orderliness with which they conducted themselves. Extraordinary populous, even to an inconvenience', was Defoe's verdict, though by later standards of urbanisation the density of population was not excessively high. The trouble then, and for the next half-century, was the physical and psychological objection to building beyond the old walls. We might today take the view that if seven or eight thousand people chose to live within a perimeter of 8,000 feet, and crept no further than Beverley Gate, they had only themselves to blame if they felt crowded! But wherever they lived within the town, it would take them a very few minutes to reach the outside world if they wished to explore it. Even at the end of the century, when Hull was a good deal bigger, and far more populous, the truant urehins from Trinity House's fine new navigation school still sallied forth in search of crab-apples and conkers, or went swimming in the healthy seabreezes of the Humber bank.

Of course, many visitors did not arrive at Beverley Gate. Their first view of the town was from Hull roads, whether they came from Danzig, London or Barton-upon-Humber. For them there was the same vista of long defensive walls, but here, on the seaward side, they were built over with warehouses and shacks, and their onceproud towers were converted to a variety of the most unlikely nonmilitary uses. At the eastern end of the walls, down to the low water mark, were the mud flats of 'Mueky South End', where the town's derelicts seraped a chilly and uneasy existence between the broken ships and the rubbish tip (commonly called the boghouse), and where the battery, its bark long worse than its bite, protected the town and added its contribution to festive occasions. The visitor by water reached safety at last when his vessel passed between the battery and the 'dolphin', heaving itself laboriously by the 'transport buoys' from the fast-flowing waters of the Humber to the calmer waters of the Hull. Before him lay the 'port' of Hull. Away into the distance on his right he could see the decaying garrison, its waterside-for the length of the town-theoretically out of bounds to shipping and commerce, though ships tied up there when the blind eye was turned. To the left he would see the business side of the haven, a thousand-yard wall of merchants' warehouses, their private staithes fronting the river and broken only by the eight narrow lanes that ran down to the water and provided the only public staithes in the town. Ahead lay the river, a heaving forest of masts, spars and tangled ropes, sorted into some sort of order by the haven master, whose symbol of office—an axe—represented his authority to cut adrift any vessel ignoring his berthing instructions. Some ships lay in mid-stream, unloading their cargoes into lighters or Humber keels under the supervision of customs officers who lived on board till unloading was complete; others pressed in seemingly haphazard fashion, two or three abreast against the staithes, with common passage made over them for loading or unloading. In the distance was North Bridge, where further progress up-river was effectively blocked, and where a constant hammering and sawing proclaimed the presence of Hull's principal shipyard, that of the Blaydes family. Everywhere there was activity, orderly confusion, and the all-pervading acrid smell of tar which, when war came, the press-gangs followed like bloodhounds.

This was the way Defoe arrived in the Hull the first time, in the ferry boat from Barton, with fifteen horses, twelve cows and eighteen sea-sick and thoroughly miserable 'passengers, called Christians'. He was immediately impressed. Casting around for a yardstick to measure this commercial phenomenon for his readers, he was forced to ignore the sleepy corn ports of the south-east, and the great coal ports of the north-east. 'If', he wrote, 'you would expect me to give an account of the city of Hamburg of Danzig, or Rotterdam, or any of the second rate cities abroad, which are famed for their commerce, the town of Hull may be a specimen. The place is indeed not so large as those; but, in proportion to the dimensions of it, I believe there is more business done in Hull than in any town of its bigness in Europe.' Liverpool and Hull (and Leeds, Newcastle and Manchester) were already growing towns challenging the older commercial centres of Bristol, Exeter and Norwich and, most significantly, Liverpool was ranked by Defoe behind Hull: 'Liverpool', he said, 'indeed of late comes after it apace; but then Livetpool has not the London trade to add to it'. About Hull's shipping Defoe was equally enthusiastic: 'their shipping is a great article in which they outdo all the towns and ports on the coast except Yarmouth, only that their shipping consists chiefly in smaller vessels than the coal trade is supplied with, though they have a great many large vessels too, which are employed in their foreign trade.'

THE GROWTH OF TRADE

(a) Patterns of Trade

The prosperity noted by visitors at the beginning of the 18th eentury had been solidly built on the transformation wrought in the 17th century, when Hull finally broke free from the tutelage of York on the one hand and of Holland on the other, and began to establish her own eonnexions with northern Europe. Although het ships continued to go principally to Hamburg and Holland, by the last quarter of the century Hull was already sending frequent ships to Gothenburg, Stockholm, Riga and Narva—all ports that were to figure prominently in her trade in the 18th century. Already she was the outlet to foreign and coastal markets for a very extensive, though relatively undeveloped, hinterland. 'All the trade at Leeds, Wakefield and Halifax', wrote Defoe, 'is transacted here, and the goods are shipped here by the merchants of Hull; all the lead trade of Derbyshire and Nottinghamshire, from Bawtry Wharf, the butter of the East and North Riding, brought down the Ouse to York: the cheese brought down the Trent from Stafford, Warwick and Cheshire, and the corn from all the counties adjacent, and brought down and shipped off here.'

In searching out markets for woollen cloth, hose, lead, corn, ironmongery and the rest, and in finding or expanding sources of raw materials, Hull merchants had already begun to take the initiative in penetrating Scandinavia and the Baltic, hitherto a Dutch preserve, with their personal representatives. The larger firms maintained their own factors or agents; the smaller firms depended on their larger rivals, used native contacts, or gave up. The fortunes of the leading merchant houses in the 18th century owed something at least to the presence in Stockholm, Gothenburg, Danzig, and eventually also Narva, Riga and St. Petersburg, of a Maister, Wilberforce, Mowld, Hobman, Fearnley, Hall or Williamson—'tied and nailed down in this hole by the fate of a younger brother', as one of the Henworths described his enforced exile in Gothenburg in 1725.

Hull factors led the English field in the Baltic for as long as English factors were common there, backed by merchant houses whose rapidly growing substance was securely based on the trade in raw materials so vital for England's industrial expansion. For these goods, wrote Defoe, with characteristic exaggeration, 'they trade to all parts of the known world'. In fact it was unnecessary for them to range so far, and throughout the century Hull merchants remained basically north European merchants. It is what one would expect, in view of their unfortunate geographical position on the 'wrong' side of the island. They never enjoyed their Liverpool and Bristol rivals' advantages in the transatlantic trade or the Londoners'

advantage in the southern European trades. Nevertheless, Hull men had their own distinctive and important role to play in the development of industrial England. From Norway, at the beginning of the century, their diligence secured all that they required of those top quality deals essential for huilding purposes in a country that had largely consumed its own woodlands. Neighbouring Sweden provided the thousands of pigs of malleable iron that alone were of sufficient quality to satisfy the cutlets, tool-makers and, eventually, the steel-makers of Yorkshire. As early as 1636 a Maister had settled in Helsingore to organise the Scandinavian trade; there was still a Maister there at the end of the 17th century, though not for much longer. The factors were on the move. Gothenburg became their headquarters for a time, but the letters that have survived indicate that factors toured the major ports of the Baltic, and that by 1725—and probably earlier—there were at least two groups of inter-related Hull factors residing in different ports, usually Gothenburg, Stockholm and Narva or Riga, but soon to include St. Petersburg as well. Sometimes they co-operated, but more often they were rivals, even to the extent of forcing up the price of iron by their competition. By the 1730s the Maister group were handling some 40 per cent of the iton exported from Gothenburg, and though the Maisters soon appeared to have left for home, in the 1750s the Gothenburg English factory still contained a goodly proportion of recognisably Hull names: John Jarrat, two of the Halls, John Wilson and William Williamson. The latter, who was the partner in Sweden of George Carnegie, represented a firm which, by the union of Mowld and Williamson interests, was to become perhaps the most important iton importer in Britain, and certainly Hull's greatest merchant house in the second half of the century.

Potentially the most important change in the pattern of trade in the early 18th century was the gradual movement eastwards across northern Europe of both factors and ships. The eastern Baltic increasingly supplied the flax and yarn required by the growing linen industry of England, and the hemp that was necessary for Hull's own rope-makers. Joshua Gee, writing in the 1730s, commented that 'hemp and flax are so useful in navigation and trade, that we cannot possibly do without them; the first for cordage of all sorts, the latter for making sail cloth, as well for the linen manufactures that are carried out in this kingdom'. His object was to stimulate a secure supply from America, but despite various bounties such a supply did not materialise, and the Baltic remained the chief source and Hull consequently remained a leading port in the flax and hemp trades throughout the 18th century. The eastern Baltic was also vital for that other necessary component of 'naval stores'—the masts and spars that came, above all, from Riga. On the other hand, the pitch and tar which—mixed with oakum and rammed between the planking—kept ships reasonably water-right, came from Scandinavia until in the mid eentury the attraction of the eolonial bounty became too great; nor until the American Revolutionary War did the Scandinavian and Baltic tat trade revive once more.

While naval stores and undressed flax were obtained from Narva, Reval or Riga, spruce linen yarn eame usually from Königsberg and Elbing, together with an assortment of sawn timber, the mats used for lining ships (especially corn ships), and such luxuries as black spruce beer and juniper berries—the latter for flavouring gin. Hull factors—a Maister or Hobman—commuted between Königsberg and Danzig in the early part of the century. Though it received fewer ships, they generally resided in Danzig because of the valuable trade carried from there by river and overland far into the interior of central and eastern Europe. There was still at least one man—a nephew of Francis Ombler, shipbuilder, timber merchant and wharfinger—in Danzig in the 1780s. This was the area best known to Hull men, for ships wintered in Danzig or Königsberg to secure the earliest cargoes of yarn or staves when the Baltic began to thaw. And if a master had ambition ro set himself up as a merchant, this was the area with which he was likely to have the strongest and most intimate connexions.

Scandinavia and the Baltic provided a great volume of bulky raw materials that employed many ships and seamen, but Hull's exports to this region were, if anything, declining in volume at the beginning of the century, and fewer loaded ships sailed to Scandinavia in 1750 than in 1650. At the same time the eastern Baltic was still relatively undeveloped, and though it could supply plenty of raw materials, it did not take anything like the same volume or value of British goods in return. Joshua Gee said that Norway took only 'guineas, crown pieces, and bullion, a little tobacco, and a few coarse woollens of small value'; the same might be said of the eastern Baltic in the first quarter of the century at least. Of infinitely greater significance were Holland and Germany, whose trade was concentrated on Hamburg, Rotterdam and, above all, Amsterdam. Shipments to these ports were forwarded to the great international fairs at Frankfurt and Leipzig, or sent in Dutch ships to Italy or even out to the ends of the Dutch empire in the Far East. Despite her Baltic emphasis, Hull was always deeply concerned with exports to Amsterdam, if only because it was in the Dutch entrepôt that she

Needless to say, every merchant had his agent in Amsterdam, and some in Rotterdam and Hamburg as well. However, since the Dutch commercial system was more advanced than the British, it was completely unnecessary for Hull merchants to maintain their own factors in Holland. It was certainly more advantageous for them to be linked with a merchant of international standing who could move goods or money for them from or to any part of Europe.

earned the credit with which to pay for her Baltic imports.

Little need be said about the remaining countries with which Hull was trading at the beginning of the century. France was a source of various kinds of fruit, wine, fine cloth, books and linseed, and a great customer for corn, lead and rape oil—the latter sent by Joseph Pease to Paris, where it was used for lighting, soap-making and for the French woollen industry. But incessant warfare and high tariff barriers militated against the development of trade, and

in any case, as Gee pointed out, 'France, above all other nations, is the worst for England to trade with: it produces most things necessary for life, and wants very little either for luxury or convenience'. The Maisters who, like the Peases, traded to France as well as with the Baltic, would not have agreed. Perhaps their attitude was vindicated by the immense expansion of Hull's trade with France after the Eden treaty of 1786 when, for the first time, the English approached the French on terms bordering on official

commercial partnership.

The Spanish and Portuguese were no more highly thought of than the French. When the French government made military noises the Spanish navy was guaranteed to join in, and the British were intensely jealous of the Spanish and Portuguese mercantilist empires. However, the Iberian countries had saving graces which the French did not have: they were major suppliers of wine, without which life would have been intolerable for all but the meanest of Englishmen. They were also the chief suppliers of that vital commodity cork, as well as of citrus fruits, which arrived in great quantities, of olive oil, and of sumach, used in the tanning of leather. Moreover, it was well known that while Englishmen could not trade freely with Spanish and Portuguese America, Spanish and Portuguese merchants were eager to buy from the English goods which they could not provide themselves. Thus, both countries were valuable customers for Hull's leather, hose and cheap kersies, the latter considered suitable for clothing slaves.

Few ships ventured beyond Malaga. The Mediterranean was thought a fearsome place, beset by pirates, plague and papacy, and Hull seamen were not keen to sail there. (They also refused to sail to Spain at the least sign of trouble, for fear of the Inquisition should war break out while they were in Spain and their peacetime immunity be ended.) America appeared remote and, as yet, principally interested in the kind of goods—such as salt, coal and gunpowder—of which Hull did not have a ready supply. Only rarely did Hull ships adventure a cargo there, and even rarer were American cargoes in Hull, apart from small shipments of rice, whale-oil and tobacco, the latter averaging about half-a-million pounds a year by the middle of the century. The lucrative trade with the East Indies was, of eourse, closed to all ports except London, though Hull tried in vain to break into it in 1708. It was said rather caustically in the 1730s that 'Our luxury is become a virtue in commeree, and our extravagances are the life and soul of our trade'. This may have been so, but alas not for Hull! Her merchants enjoyed but a small share in the frankly luxurious trades in which the largest profits could be extracted from a greedy market.

Despite its limited extent, Hull's trade undoubtedly appeared impressive at the beginning of the 18th century. Her growth had been spectacular, thinking in terms of the poverty-stricken past, when Hull men sailed the ships and York men drew the profits. The ships arriving from the Baltic probably carried more flax than those of any other English port, and more wood and iron than those of

most ports. Ships clearing for Holland carried perhaps a tenth of English cloth exports, and a large proportion of English lead, while Defoe thought Hull's export of corn 'as well to London as to Holland and France, exceeds all of the kind, that is or can be done at any port in England, London excepted'. But all growth and all size is relative, and it would be well for us to look at Hull in the early 18th century from a different viewpoint. Compared with her past she was magnificent; compared with her future she was puny. In 1700 she was more medieval than modern, both as a town and as a port. Her ships were few and tiny; her trade small in volume, extent and range of commodities; and her wealth was limited. Nor did she appear to have any worthwhile footing in the trades that we know to have been the great growth trades—those with the colonies in America and the West Indies, with Africa and the East. Bristol, Liverpool and eventually Glasgow, grew to prominence on their immensely valuable entrepôt trades based on the transatlantic run. to say nothing of their interest in the slave trade, in which Hull did not participate. Compared with these places, Hull was insignificant. She received 8,000 tons of shipping in 1709, compared with Bristol's 20,000 and Liverpool's 15,000, and only 6,000 tons cleared from Hull compared with 21,000 from Bristol, 13,000 from Liverpool, 40,000 from Newcastle and 25,000 from Whitehaven. Admittedly the Neweastle tonnage was in eoal, and some at least of the tonnage of Liverpool and Bristol was trade with Ireland, which was counted as foreign, but it is not particularly meaningful to claim for Hull a high ranking among English ports. The truth is that Hull was little ahead of places like Yarmouth and far behind Liverpool and Bristol; and that all of them were so far behind London that no outport, in 1700, had a really significant share of foreign trade. What the 18th century witnessed was not only the rapid advance of Hull's trade-which, with that of Liverpool, did indeed grow faster than that of any other leading port—but also the relative rise of the outports' trade compared with London trade, as the industrial heart of England developed.

(b) The Beginnings of Change, c.1700-63

The opening years of the 18th century were not particularly propitious ones for Hull merchants. There was srill no colonial trade worth mentioning, and no marked expansion of the European trades, owing ro the wars that raged so long around Louis xiv and then between the Swedes and the Russians. The number and tonnage of shipping entering and clearing at Hull appears to have remained remarkably steady in the early years of the century, with a notable improvement in the number of ships entering in the early 1730s and clearing in the late 1740s (Table 1).

Table I TONNAGE OF SHIPPING ENTERING & LEAVING HULL

Year	Entering	Leaving
1709	8,090	5,780
1716	10,565	8,571
1723	11,005	7,050
1730	12,440	8,168
1737	19,008	9,245
1 744	11,328	9,185
1751	23,598	15,794

We must, of course, bear in mind that these are sample years only, preserved, for some unknown reason, at seven-yearly intervals. Other figures for ships clearing annually in the period 1709-16 indicate that tonnage more than doubled between 1709 and 1713 before collapsing again between 1715 and 1716. However, this does not necessarily invalidate the sample figures. The general trend in Hull's trade throughout the century is so clear that it is almost as accurately revealed by taking sample years as by performing an elaborate statistical operation to establish trend. The figures for ships entering can be checked against the records of ships paying tolls to the Danish government as they passed through the Sound. These figures, converted to five-yearly averages to eliminate rogue years, show precisely the same pattern as appears in our tonnage figures: a steady decline from a high point in the 1680s to a very low point in the 1690s; a recovery around the turn of the century, and then a catastrophic decline in 1705-9; a fluctuating rise thereafter, and finally the first real breakthrough with a massive rise between 1720-24 and 1725-29.

The advance of the 1730s is noticeable also in the volume of leading imports, as given in the official customs returns. If anything, these figures will understate the volume of trade because of smuggling, though there is no teason to suppose widespread smuggling in the sort of goods in which Hull traded. Admitting, then, the possibility of under-recording, the official volume of undressed flax rose by 73 per cent between 1728 and 1737, linen yarn by 233 per cent, hemp by 224 per cent, deals by 49 per cent and iron by 54 per cent. More significant, however, than the growth in volumes was the gradual yet momentous change in the geographical distribution of trade. In 1717, for instance, no ships at all had arrived in Hull from Narva, only 2 from St. Petersburg and 9 from Riga; but in 1737, following the Anglo-Russian treaty of 1734 (which, among other things, made life easiet for British factors residing in Russia), 11 ships came from Narva, 7 from St. Petersburg and 20 from Riga. The 1734 treaty was itself a significant step in Britain's march eastwards, for it marked the ending of Dutch domination of the Russian trade. It was also, indirectly, an admission that bounties on colonial naval stores were never going to create a cost-advantage in their favour, which, had it happened, might well have seriously damaged

Hull's trading potential vis-à-vis Liverpool and Bristol.

The eastern trade grew in importance with the rapid increase in the demand for raw materials after the ending of the Austrian Succession War in 1748. A good example of this was the trade in linen yarn, of the greatest importance to the English linen industry, which could never be based on an adequate supply of locally-grown flax. Amsterdam and Hamburg had always been the chief source for the leading variety—raw Durch linen yarn imporred hefore the war, but there had been no improvement in the quantity available, which was only a little greater in 1751 than it had been in 1717. However, there was a major advance in the supply of spruce linen yarn from Königsburg. None at all had heen imported in 1702, but by 1737 it was equal to about 60 per cent of the raw Dutch imports—though admittedly in 1737 this was not a very great amount; then, quite suddenly, spruce yarn shot ahead to reach 419,000 lb. in 1751, compared with 275,000 lb. of raw Dutch. At the same time Königsburg was also a major new source of linseed, imports of which increased ten-fold between 1737 and 1751 as the Hull seed-crushing industry developed.

The same is true of the wood trade. The traditional source of Hull's wood imports had been Norway, whose sawmills, with their fine blades, were thought to produce the very best quality deals; but they had already reached their maximum output, despite timber brought over the border from Sweden to supplement the dwindling Norwegian forests. The slow rise of Hull's 'timber' trade (timber being not the generic term for wood, but a specific kind of unsawn rough wood in large logs) from nothing at the beginning of the century to 1,135 loads in 1758 was owing almost entirely to the opening up of Russian forests tapped by Memel and St. Petersburg. Deals also came from Russia as the total import doubled between 1738 and 1758, and soon Hull was taking almost half of all the deals exported from St. Petersburg, Similarly, the immense rise in imported iron, from 3,964 tons in 1737 to 6,058 tons in 1758, was owing largely to the increasing trade in Russian iron which, like Russian wood, had been largely ignored by Hull merchants and eagerly sought after by the less particular London merchants. The iron men of Leeds, Sheffield, Rotherham and Birmingham were reluctant at first to take Russian iron, and had to be won over by 'cheap offers' and intensive persuasion to Tswordischoff's New Sable iron, or something similar, until the best quality Oregrund from Sweden was reserved exclusively for such as made steel in Sheffield.

It is worth pausing for a moment to emphasise the point that Hull's trade depended as much on the economic development of the eastern Baltic as it did on the development of Yorkshire and the Midlands. For this reason the Northern war, in the first two decades of the century, though exceedingly damaging at the time, was of lasting benefit to Hull, since it effectively confirmed the desire of Peter the Great that Russia should enter fully into the commercial

life of Western Europe. Moreover, while the metchants of Bristol, Liverpool and Glasgow were busy stimulating the West Indian and North American colonies by their investments in plantations and sugar and tobacco crops, the merchants of Hull (and, of course, London) were doing more or less the same service—though on a smaller scale-for the eastern Baltic. We do not know how much Hull money was lent or spenr in Russia, or even how many Hull men were resident there, but our rather vague and accidentally surviving information indicates that Hull men were to be found in the English trading stations of Riga, Natva and St. Petersburg from rhe earliest times. The Thorleys, who appear to have moved their headquarrers from Hull to Narva, were leading merchants and hankers there in the second half of the century; the Thorntons were among the leading merchants in St. Petershurg; the inter-related firms of Wilberforce, Thornton and Porter were the greatest Russian merchants in Britain, wirh seven or eight members of their various partnerships in Parliamenr at some time or other during the French Revolutionary Wars; and it was probably one of the Hull Thompsons—of whom there were several prominent families who indirectly benefited the world of marine insurance by fathering in St. Petersburg the illegitimate John Julius Angersrein, the renowned merchant and underwriter, and first 'ehaitman' of Lloyds.

Despite the great volume, value and potential of the trades in Scandinavian and eastern Baltie raw materials, it would be wrong to emphasise these to the exclusion of all else. There were other things that showed notable improvements though they were smaller in volume, such as smalts (a dye-stuff) and madder, staves and cork, steel and copper. There were also improvements in a number of manufactured items, such as spinning-wheels, melting-pots for goldsmiths, and inkle (linen tape) (all these things coming from Holland). Above all there was linen, and again the story is one of drift to the east. English linen was poor quality 'humpkin ware' at the beginning of the century, and Defoe, in drawing up his Plan of the English Commerce, reckoned that 'the only foreign manufactures we may be said to import wholly is linen and paper, and tin-plates'. The best quality linen was narrow Holland and narrow Germany, which grew in quantity from 41,000 ells in 1717 to 85,000 ells in 1751; but more important was the poorer quality narrow Russia, which rose from 2,000 ells in 1717 to 127,000 ells in 1751. Again, Hessian and Vitry canvas came in small quantities, but were completely overshadowed by Spruce canvas, of which 288,000 ells were imported in 1717 and 1,013,000 ells in 1751.

Finally there were a number of trades that did not excite attention because they did not employ vast amounts of shipping space and did not expand at the same rate as the goods already mentioned. Wine is a good example. Although some ships were devoted almost exclusively towine and the associated oranges, lemons and oil trades, they were relatively few in number and small in size. Some wine eame from the Rhineland, France, and Italy (rarely), though Spain and Portugal were the chief source. The trade with

Bordeaux was extremely erratic, but generally speaking the number of wine ships arriving in Hull remained fairly steady at between fifteen and twenty for most of the first three-quarters of the century. The volume of wine also fluctuated considerably, depending on the vintage as much as on more pedestrian economic considerations, from around 200,000 gallons to 300,000 gallons, but there was no very apparent trend upwards. The quantity of oranges and lemons, however, declined considerably in the first half of the century, possibly because Hull ships concentrated on wine and left fruit and oil to the London eoastal trade, which began to supply them in greater quantities.

There was also one very noticeable change in the manufactures trades noted by Defoe. While linen and canvas continued to grow, and while the English for years to come were to cast their accounts and print their books on paper imported from Holland (using imported pens, type and printing ink), the import of tin plate from Germany had ceased by the middle of the century, when export began. The tin plate trade, perhaps more than any other, is symbolic

of the changes taking place in Hull's hinterland.

The shift in the distribution of the export trade is equally noticeable. In 1728 some 40 ships, a third of all those clearing from Hull in freight, went to Scandinavia and Denmark, but by the middle of the century they had fallen away to ten-and went on falling. It is not absolutely clear why this should have been so, though many possibilities suggest themselves. Perhaps the Norwegians and Swedes were happy to sell their wood and their iron to the British, but increasingly preferred the manufactures of the Dutch and the Germans from whom the British were laboriously learning many of their industrial techniques. More likely, it was owing to the growing sophistication in the raw materials trades. Wood often came to Hull in specially constructed Norwegian ships that did not look for a return cargo but went back in ballast for another loading of wood. At the same time there was less barter trade, and iron and wood importers who could pay for their imports by bills on Amsterdam were less interested in searching for eargoes to please the Scandinavians. Much of the Maisters' export trade to Seandinavia appears to have depended on the initiative of their own factor there, and the ending of their trade to Denmark, for instance, followed the departure of their factor from Helsingore to Gothenburg. It may, on a more personal level, be significant that the decline of the export trade to Norway followed rapidly on the death of Alderman Ashmole, one of the leading timber importers and the chief exporter to Norway in his day. However, it must be admitted that surviving merchant papers do not convey an impression of growing specialisation; the young Maisters were as keen as the old Maisters to send anything anywhere if it brought a profit. Could it simply be that in the early years of the century ships were entered in the Customs records because they had on board small consignments of goods sent out to factors, rather than full loadings, and that a reduction in the number of ships clearing 'in freight' (which could

mean a few barrels of ale, half-a-dozen cheeses and a bundle of books for brother William in Helsingore) did nor really mean a reduction in the total volume of trade goods, but a more con-

centrated use of shipping space?

Whatever the reason for the decline in the number of ships sailing to Scandinavia, ir was more than offset by the growing number clearing for the eastern Baltic. Sixteen ships sailed in freight for Russia, Poland and Prussia in 1717 and 40 in 1758. The proportion of ships going to the principal markets in Holland and Germany kept in step with developments in the Baltic, taking about

half of the ships elearing in freight throughout the century.

Export commodities as a whole did not stagnate at the beginning of the century in quite the way implied by the shipping figures. Lead, among the heaviest and commonest of Hull's export cargoes, increased gradually from 1,609 tons in 1702 to 3,347 tons in 1758, and was supplemented by red lead, which grew at a staggering rate from 1,848 cwt. in 1717 to 19,158 cwt. in 1737, and by white lead, which appeared amongst exports for the first time in the thirties. Ironmongery rose at a rate greater than red lead, from a single ton in 1702 to 203 rons in 1737 and 850 tons in 1751. Ale also increased ten-fold between 1717 and 1737, and cargoes in the thirties were swelled by the growth of the new rape- and linseed-cake exports

and by the beginning of the trade in earthenware.

Trends look impressive, but they may not fill ships. While Hull was gaining her hundredweights of one thing she was loosing her tons of another. Coal export declined and was more or less finished by the thirties, and the trades in bricks and leather, barley, malt and butter were all in decline as these things wenr increasingly to supply the expanding domestic market, swelling the coastal trade at the expense of the foreign trade. Most important of all were the changes taking place in the cloth trade. The sample years show a very considerable decline in the quantity of cloths exported, though fortunately the most drastic reduction was in kersies, the cheapest variety of coarse woollens that were gradually being replaced by linen, and which the Russian government prohibited in 1718 in an attempt to foster their own woollen industry. The recovery of cloth exports in the thirties was yet another of the factors giving the appearance of abundant growth to the decade or so preceding the outbreak of war in 1783.

(c) Consolidation, c. 1763-83

It has become common in recent years to date the Industrial Revolution from 1780, or perhaps more accurately from the ending of the American Revolutionary War in 1783, and, as we shall see, trade and shipping figures certainly bear out this choice for the 'take-off into sustained growth'. But it remains true that the Industrial Revolution had a long 'prehistory', and much of this is reflected in the tremendous growth in Hull's trade in the twenty years or so

preceding 1783. The end of the Seven Years War in 1763, confirming the final triumph of the English over the eolonial ambitions of the French, was the signal for advance in almost all trades, eolonial or otherwise. Cloth was exported at a rate hitherto unknown, to almost every place with which Hull had connexions, with the older woollens supplemented by the newer linen/cottons from Derbyshire and Laneashire. The number of dozens exported rose rapidly from 69,728 pieces in 1758 to 163,710 in 1783, bayes from 44,040 to 134,600, plains from 914 to 15,520, and the valuable 'cotton velvets' and 'Manchester cottons' from only 20 to 236,834. Soon after the middle of the century it was estimated that Yorkshire cloth going to Hamburg alone was worth around £100,000 a year, and the Hamburg hose trade was worth another £20,000. Hose, from the Leicestershire and Nottinghamshire region, went in huge quantities to both northern and southern Europe, and worsted garters can be reekoned by the million. So too ean the pieces of pottery from Leeds and Staffordshire, which, more than anything else, responded to the building of the canals: fewer than half-amillion pieces were exported in 1758, but over thirteen-and-aquarter million pieces were sent out in the foreign trade alone in 1783. The Yorkshire iron industry was represented by ironmongery, which rose five-fold, from 1758 to 1783, when it stood at 4,676 tons, and 'manufactured iron', which rose from nothing to 6371 tons, while the new-found ability to roll and tin iron, which had led to the decline of tin plate imports by the middle of the century, provided a valuable new trade: 3,375 tinned plates were exported in 1758 and something over five-and-a-half million in 1783. Across the whole spectrum of trade goods there were signs of growth that augured well for the future once the Peace of Paris liberated trade and industry from the impediment of war.

Exports, impressive though they were, would almost certainly have been much greater had our sample year 1783 not unavoidably coincided with the ending of the American Revolutionary War, when Britain was also, for part of the year, at war with France, Spain and Holland. Fortunately war did not disrupt the import trade as violently as the export trade, partly because Holland was the best customer for most of the manufactured goods exported

from Britain, but not a great supplier of raw materials.

Supplies for the eloth industry were very much in evidence after the middle of the century. By the early 1780s Spruce linen yam from Prussia and raw Dutch from Hamburg and Amsterdam had together reached over five million pounds, and Hull was the leading port in the trade, despite Liverpool's position as intermediary between Manchester and the Irish flax industry. The importation of flax was also expanding apace, much of it soon to be diverted to Marshall's mill at Leeds, where they were beginning to spin yarn as good as most of that imported from the Baltic. Tow had also made its appearance, probably in the sixties, but the great expansion in the trade eame later, when Marshall's also developed a machine for spinning it.

It was not simply the basic raw materials for cloth production that had to be imported from abroad or eoastwise. England was also sadly lacking in dye-stuffs and, indeed, in ehemicals in general. As a result the rapid expansion of the textile and other industries produced a tremendous demand for such things as potash, madder, smalts and arsenic. A rising demand for oil encouraged both the whaling trade and the local seed-crushing industry, while the development of a completely new Hull industry, with its consequent trade in rags 'fit only for paper-making', reminds us that the Industrial Revolution was in fact a complex and diverse movement in the economy as a whole, with equally complex and diverse ramifications in trade, though the quantities of goods might still be small at this period.

Still predominating among imports were the two basic commodities for which Hull was already famous: iron and wood. Iron imports had continued to grow, from around 6,000 tons in 1758 to around 8,000 tons in both 1768 and 1783, with Russian iron gaining ground, but with Hull also pushing up her share of the national importation of Swedish iron, as more of the best quality came in for the Sheffield region and more of the poorer stuff for the workshops of London. The trade was, in fact, fast approaching its peak, for the British iron industry, so long the producer of inferior quality iron, was soon to be revolutionised by the application of Cort's puddling process, the products of which were tested to breaking strength in all the naval dockyards in the years 1784-6 and were found to have the

qualities of Swedish iron 'in a supereminent degree'.

So far as wood was concerned, there was no very marked advance in this part of the century; indeed, the quantity imported in 1768 was smaller than in 1758 and hardly greater than in 1737. This may be a deficiency in our sample year, but it seems more likely that the trade was marking time until Russian deals became more plentiful (Archangel and Onega were not yet regular suppliers for Hull). At the same time, the development of sawmills in Hull Itself meant that Hull was more ready than hitherto to import unsawn timber, and one eomes across the designation 'timber merchant' (as opposed to 'raff merchant', dealing in deals) for the first time when it is applied to men like Alderman William Osbourne who, at least by the 1790s, was sawing by steam power. In 1758 the total import of timber-almost entirely from Russia-had been only 1,135 loads (of fifty eubic feet); by 1768 it had risen to 8,260 loads, though it was somewhat lower in 1783. Rather surprisingly, the quantity of stayes (and most exports and manufactures were casked rather than boxed) remained fairly steady, but there was a 100 per cent rise in battens between 1768 and 1783. They came to serve neither industry nor building, but to stand once more in the countryside: the principal part of them, it was stated in a raf. merchants' petition of 1787, 'are consumed for the improvement of agriculture in inclosures etc., for which no other article can be substituted on the same terms for the convenient and expeditious raising of fences'.

It would be fair to assume that by 1783 most of the new mills. foundries, potteries and workshops to the east of the Pennines, and many to the west of them, were partly constructed with wood and iron imported through Hull, and had their yarns, dyes or mordants, their brass, copper, zinc or iron, their clay and flints, their taps and cocks, their leather belting and their lighting oil from Hull. Arkwright bought his wood there for the Cromford mill, and he and Strutt got their yarn there; Worthington and Wilson bought their barrel staves there; Walker at Rotherham, Wedgwood at Etruria. Butlers at Leeds-all owed much to their connexions with Hull, The great merchant houses, with their vast network of connexions from Ripon to Biriningham and from Manchester to Loughborough. sent wooden railways to Staffordshire, cribwood and pitprops to the developing Nottinghamshire coalfield, and whale oil for the street lights of Birmingham. The array of goods and lists of places is endless.

The movements in imports and exports described above are clearly reflected in the tonnage of shipping entering and leaving the port, for which we fortunately have annual figures from 1765 to 1781 in the import trade and from 1765 to 1772 in the export trade (Table 2). Similarly, some indication of the changing distribution of trade ean be seen in the number of ships entering from and clearing for specific regions (Table 3).

Table 2
TONNAGE OF SHIPPING ENTERING & LEAVING HULL.

Year	Entering	Leaving
-1751	23,598	15,794
~1758	20,713	12,258
-1765	34,011	15,926
1766	31,750	16,610
1767	42,006	16,267
- 1768	40,790	17,207
1769	40,631	18,191
- 1770	46,475	19,795
1771	43,991	18,675
1772	45,434	18,361
1773	48,928	_
1774	50,368	
1 <i>7</i> 75	52,150	
1776	46,933	
1777	48,342	_
1778	49,068	_
- 1779	40,479	23,589
1780	38,424	_
1781	43,268	_

TABLE 3

THE NUMBER OF SHIPS ENTERING FROM AND CLEARING FOR SPECIFIED REGIONS

(Sample years, 1717-83)

					Em	tering		
			1717	1728	1737	1758	1768	1783
Scandinavia	,		36	69	89	75	76	44
Russia/Livonia		****	11	19	38	26	61	67
Poland/Prussia			15	37	20	20	62	75
Germany/Holla			47	79	55	42	64	45
France			0	1	7	0	5	1
Spain/Portugal			14	13	25	7	19	0
America			1	1	3	14	23	0
TOTAL			124	224	239	184	316	233
					Clea	ring		
			1717	1728	1737	1758	1768	1783
Scandinavia		****	19	39	15	10	11	5
Russia/Livonia		****	12	14	9	26	28	50
Poland/Prussia			4	7	8	14	28	42
Germany/Holla	nd		70	52	57	59	45	7
France		,	6	0	6	0	8	0
Spain/Portugal			5	8	42	6	17	1
America		****	1	0	1	6	9	0
TOTAL			129	126	153	125	149	105

(d) Expansion after 1783

Developments in trade between the ending of the Seven Years War and the beginning of the American Revolutionary War were, in contemporary eyes, well-nigh miraculous. Developments in the decade following the peace in 1783 were unbelievable, a fact which held up vital dock building in Hull and elsewhere because merchants simply refused to believe that their good fortune could possibly last. Shipping entering Hull rose from 92,120 measured tons in 1787 to a little over 135,000 tons in 1792, which marked the highest point yet reached in foreign trade. To some extent the merchants-and, indeed, the British economy as a whole-were over-trading, and the year 1793 saw not only a peak in Hull's exports but also the first serious financial crisis. A period of more sober trading eventually led to another peak in 1796-7, and that in turn was followed by the great crisis of confidence in 1797, when the Bank of England suspended cash payments, and all those who lived by credit were anxiously counting their liquid assests. Thereafter trade appears to have been fairly sready with entries standing at about 120,000 tons in both 1800 and 1805, until the major decline, brought about by the application of embargoes with the 'Continental System' and the Orders in Council, in the period 1806-9 inclusive. Not until 1811 did trade really begin to recover and measure up

once more to the high levels of the early ninetics.

It is unfortunately necessary to talk in vague terms of this period because we know less about the twenty years following 1790 than about almost any other period of local economic history since the Middle Ages. The Customs ceased to preserve their records for individual ports (from which the national statement of trade and navigation was compiled) some time in the early 1780s in England, though in Seorland they preserved them well into the 1830s. At the same time, for a number of years they also neglected to draw up—or preserve—adequate tables of ships trading at individual ports, though for the purposes of the Navigation Acts they kept most elaborate accounts of the ships owned by individual ports. Fortunately the gap is filled to some extent for the import trade by an analysis, in connexion with the Warehousing Acts, of goods entered at individual ports for the years 1790-2, 1799-1802 and 1803-7.

As we should expect, the figures for 1790-2 reveal yet another massive increase in the import of the basic raw materials. Hemp, deals and bar iron had almost doubled since 1783, while timber had trebled to an average of 20,917 loads (in 1790 it stood at 30,515 loads). Besides these obvious commodities there had also heen noticeable improvements in a whole variety of goods, some of rhem reaching their fastest rate of growth in the last decade of the century. Groceries, wines and spirits are good examples. The import of dried fruit direct from the Mediterranean had always heen small but, as we shall see below, more ships were to be found coming from Italy or Greece, so that raisins, which had been only 785 cwt. in 1783, had reached 8,610 cwt. by 1799-1802, with 20,715 cwt. in 1802. Currants made an even more spectacular appearance, while the volume of imported wine more or less doubled between 1783 and 1790-2, when Hull was importing about seven per eenr of the national total, exceeded only by Bristol of the outports. There was a similar advance in the spirits rrade, and by 1790-2 Hull was importing almost a tenth of the national rotal.

Flax and linen yarn were unfortunately ommitted from the tables, but tow made great strides at the end of the century. By contrast, manufactured linens continued their downward trend, and canvas was down to an average of only 111,000 ells for 1803-7. England was, at last, able to provide her own linen clorh and canvas.

Russia and Prussia stand supreme among Hull's rrading partners at the turn of the century (Tahle 4), with St. Petersburg alone accounting for one out of every four or five ships entering Hull, while Hull in turn was receiving about one in five of the ships clearing from St. Petersburg. Ships from Russia passed the 150 mark for the first time (in our sample years) in 1792, from Prussia in 1802. But these trades were not the only ones bounding with energy. Though the Norwegian trade showed no signs of improvement, the number of ships arriving from Sweden grew considerably

perhaps because deals previously shipped out through Norway were now going through Swedish ports, with Hull taking a quarter

of the national import of Stockholm deals in 1803.

There was growth elsewhere, as well. The number of ships arriving from Holland and Germany increased considerably, the latter to some extent being a diversion of the French trade. Apart from the remaining traditional trades, which made what might be described as a normal recovery after 1783, there were a number of newer trades which deserve special mention. The connexions with the Mediterranean, always rather tenuous, were confirmed in the nineties, as Todd & Popple, members of the Levant Company, increased their business, and Terry & Wright set up a special company, with three ships, specifically to trade with Italy. (Greece is unique in that although we know that ships occasionally arrived from there with dried fruit, wines and cotton, not a single entry was made during any of our sample years in the 18th century.) The American trade revived fairly quickly after the war, and began to expand rapidly at the turn of the century, when it finally became economically feasible to transport Brirish North American timber. Ships from Nova Scotia, for instance, had been very rare in the nineties, though Hull was said to have been one of the first ports to arrempt to import British North American timber as prices began ro rise in Europe. At the same time, the West Indian trade showed signs of growth, reflected in the rising direct import of sugar, and for a time there were also signs of a direct trade developing with Spanish America.

Table 4
THE NUMBER OF SHIPS ENTERING FROM AND
CLEARING FOR SPECIFIED REGIONS

(Sample years, 1783-1803)

	Entering				Clearing		
	1783	1792	1802-3	1783	1790	1802-3	
*Scandinavia	44	97	I44	4	4	21	
Russia/Livonia	67	182	153	50	49	46	
Poland/Prussia	75	116	193	42	33	52	
Germany/Holland	45	100	120	7	94	121	
France/Flanders	1	23	1 I	0	55	3	
Spain/Portugal	0	39	30	1	20	37	
America	0	24†	30	0	9	20	
TOTAL	233	613	691	105	277	301	

^{*}includes Finland | †includes 2 from Spanish America

In the absence of commodiry statistics, comments on the export trade must be confined to shipping statistics. It would appear that for a time the export trade was growing faster in volume than

the import trade in the early nineties, with the tonnage clearing from Hull rising from around 46,000 tons in 1787 to almost 87,000 tons in 1794. However, exports seem to have been more affected, as we have already noted, by the troubles of war, an indication, no doubt, of the strength of the English domestic market compared with the export market as a consumer of British manufactures. In both 1790 and 1800 clearances were approximately 44,000 tons. Perhaps the most interesting feature of the number of ships leaving Hull was the development shown in the trade to France and Flanders, which were gaining ground as customers in the years before the war. It was obstruction placed in the way of this trade that helps to explain the great increase in the number of ships sailing to Germany-in effect Hamburg, where goods were forwarded to France. Indeed, the number of ships and the volume of goods destined for France was probably always greater than appeared in the official declarations of destination. The Broadleys, for instance, were furious when trouble developed between France and the United States in 1799 and appeared likely to spoil their cloth trade: they used to put their marks on our cloth and so procure them admission into France'.

The number of ships trading with any particular country is a useful guide to growth or decline of trade with that country and a fair indication of the relative standing of trade with different countries. But it can be no more than fair, for 18th-century ships were individuals, no two the same; they varied in size from under 50 to over 1,000 tons, and some might doubt the possibility of assessing trends when ten ships one year might be, in aggregate, smaller than five ships the next year. Obviously we must allow for some fluctuation in size, with a consequent margin for error, but in fact every indication we have points to a measure of uniformity among ships in particular trades. In other words, the differences in tonnage were less between ships sailing to the same country and meeting the same trading and harbour conditions, than they were between ships sailing to different countries. The average ship arriving from France in 1790 was a little under 100 tons, from Holland and Germany about 110 tons, from Sweden around 200 tons, from Prussia 260 tons, and from Russia 280 tons. Bearing in mind these differences in size, it is clearly necessary to look again at the tables of numbers of ships entering and clearing from Hull, for it would appear that the trades employing the largest numbers of ships were also employing the biggest ships. Thus, the Russian trade was more important, and the French and Spanish trades less important, so far as volume is concerned, than appears from the number of ships engaged in trade. To arrive at a more accurate picture of the relative importance of the different regions we ought to compare the total tonnage involved, but this kind of information is not available for most years. However, it is preserved in Customs records for 1789-91, and figures for a number of years were presented in evidence before the Commissioners enquiring into the Condition of Municipal Corporations, and these are the easiest to

use and present a reasonable summary of the volume of Hull's trade in the period 1790-1810 (Table 5).

TABLE 5
TONNAGE OF SHIPPING AT HULL ENTERING FROM AND CLEARING FOR SPECIFIED REGIONS, 1790-1810

			Ente	ring	
		1790	1800	1805	1810
The Baltic		61,964	83,732	89,203	73,786
Mediterranean		1,583*	1,147	2,064	1,011
Rest of Europe		20,142	28,964	13,750	8,671
Brit, N. America		0	0	860	5,296
United States		2,775	2,266	1,874	2,745
West Indies	• • • •	625	203	638	704
			Clea	ring	
		1790	1800	1805	1810
The Baltic		18,729	15,101	35,798	8,385
Mediterranean		2,615	941	579	1,028
Rest of Europe		20,982	24,007	12,281	7,615
Brit. N. America		0	0	460	902
United States		1,117	2,888	2,469	3,679
West Indies		638	314	423	1,241

*the commissioners' report, p. 1573, has 308 tons, but this was a single ship from Gihtaltar; six ships, measuring 1,275 tons, from Italy were overlooked.

(e) The Whaling Trade

In the 18th century Hull based her fortune and her future firmly on her specialisation in the trade with northern Europe. But her fame, at least locally, lies elsewhere than in the boring Baltic run. Few local people have heard of the Williamsons, but most will know of Sam Standidge. For while Bristol and Glasgow were renowned for their tobacco and sugar trades, and Liverpool was unjustly notorious for its slave trade, Hull is best remembered for a trade that was morally above reproach yet certainly bloody and far from humane: the 'trade' with Greenland, where blubber was sliced from the great Arctic whale, and the skins were torn from the seal—too often, it was said, from the living seal.

It was precisely because the Arctic trade was so rough and cruel to beast and man alike that it has attracted so much attention, and produced so many contemporary books and so many carefully preserved logs. It was, at the time, the one trade that excited everyone's attention, curiosity and sympathy. The fog, cold and ice

took a heavy toll in men—the more so because of the very large erews carried by whalers—and the whales fought back with vigour. They were chased by six-man boats (one for each 50 tons of whaler) sent out from whalers 'docked' in the pack-ice; they were caught by non-lethal harpoons and played at the end of three or four hundred yards of rope that ran out so fast that it upset or fired the timber of boats manned by unskilled linesmen. It took an hour or more (less if more harpoons could be fixed) for the animal to weaken from exhaustion and loss of blood; when it surfaced for the last time it was despatched with lances, but its gigantic death-throe might still be the death-blow of its captors. There might, indeed, be danger on the cosy Hamburg run, but the chapels said prayers for the Greenlandmen, and the whole town mourned the 40 men of a whaler crushed in the ice.

Like so many trades and industries, whaling was a Dutch art. practised in Hull in the 17th century but long forgotten. Whale-oil and bone were imported from Holland or from North America. where interest in whaling developed among the men of Rhode Island in the 1730s. The re-emergence of the industry in Hull was a response to war conditions in the middle of the century, eutting off supplies from both America and Holland. Men engaged in American trade, such as William Welfitt, Hull's leading tobacco importer, and James Hamilton, an important tar and general merchant, seized the opportunity and sent ships direct to the Arctic in 1754 and 1755 respectively. Three more ships—the Berry, Pool and Leviathan—were equipped in 1754 by the Hull Whale Fishery Company, a £20,000 venture launched by a group of oil-men, bone merchants and master mariners, among whom the Peases and their relations were predominant. Unfortunately neither the individual merchants nor the Hull whale fishery-which monopolised the industry from 1758 to 1762—were financially successful to the point where they thought it worthwhile to continue, and when peace returned in 1763 they reverted to their previous suppliers in America and Holland, who were able to advance their output considerably. The average of oil imported into England from America, for instance, had been 3,331 tons between 1749 and 1755, and only 2,675 tons between 1756 and 1762, but it was no less than 6,094 tons in the period 1763-9! However, the growing demand for oil implied in these figures, coupled with a duty on American oil in 1766, encouraged a renewed attempt at whaling from Hull in that year, when Samuel Standidge, lately a master mariner in the American trade, took the old Hull whale fishery vessel Berry to the Arctic. The trip was not an outstanding success, bringing home the oil from only one whale, and 400 seal skins which were worth a mere hundred pounds. Nevertheless, the prospect seemed reasonable, and in the following year Standidge took two ships, and three in 1769, when he was joined by another three managing-owners. The number of whalers continued to expand slowly, until the American Revolutionary War brought the conditions for which the English whaling interests had been waiting.

Some 50 American whalers were requisitioned during the war, and many others fled to Europe when they discovered that 'rebel' oil was not acceptable on the English market. At the end of the war United States oil was foreign, subject to duties and deprived of hounties, and as a result the English whaling fleet rose from 89 vessels in 1784 to 222 in 1788, and Hull's fleet from 9 to 34 (together with a couple of smaller vessels that made the more adventurous journey to the newly developed Southern Whale Fishery). For anyone who could summon up the funds, a share in a whaler appeared to be the key to Eldorado in the 1780s.

Alas! the number of whales did not increase with the number of whalers, and when average profits consequently tumbled, the whaling fleet contracted almost as rapidly as it had expanded. The industry sensibly gravitated towards those ports serving the best consuming hinterlands, and Hull's share of the total English whaling fleet rose sharply, from 11 per cent in 1788 to 44 per cent in 1800, when she had 24 ships. Five years later the number of ships was almost 40, and almost 60 in 1815, when the industry was nearing its peak (which came, in fact, in the years 1819-20) (Table 6).

Table 6
WHALERS FITTING OUT FROM HULL

(five-vearly averages)

	(IIVE Jean)	y averages,	
1755-9	5.0	1785-9	26.0
1760-4	1.4	1790-4	16.0
1765-9	2.4	1795-9	20.6
1770-4	8 · 2	1800-4	32.2
1775-9	8 • 4	1805-9	33.0
1780-4	4.8	1810-14	47 · 2

The volume of oil brought home was determined not so much by the number of Hull whalers as by the total number of whalers active in the Arctic. For instance, the oil brought back by the 26 whalers of 1785-9 was less than half that brought home by the 21 whalers of 1795-9. Although one or two of the early whalers of the fifties made good catches, average cargoes were low until the decline in the national total of whaling ships in the 1790s. Tonnage of whale-oil imports increased considerably in the late 1780s (Table 7), but only once before 1795 did the quantity exceed 1,000 tons (in 1777). It was not until the turn of the century that the rapidly rising number of whalers, with unheard of average cargoes, began to push up the volume of oil until, by 1817, it stood at no less than 7,379 tons, a figure exceeded only once in the history of Hull whaling, in 1820.

TABLE 7

AVERAGE WHALE-OIL IMPORTS

	(tons)	
1775-9	•	196
1785-9		884
1795-9		1,775
1805-9		4,383
1810-14		5,628

These figures are important not only for the economic significance of their rapid increase, but also for the increasing proportion of the national trade which they represent. In 1790 Hull was importing about 9 per cent of the national total of whale-oil, 15 per cent in 1800, and 28 per cent in 1805. Thereafter, Hull usually had a little over a third of all the whale-oil coming into the country.

More important, relatively speaking, was Hull's share of the national trade in whalebone, worth ten times as much as oil in the 18th century and slightly less in the early 19th century when, for a time, fashion released middle and upper class females from their whalebone prisons and the actresses of Hull's Theatre Royal, to the disgust of the bone merchants as much as the Merhodists, revealed their natural beauties to the ogling Greenlandmen. Hull had always shown a keen interest in whalebone, importing it from Holland earlier in the century, and buying it from other ports at the end of the century. In the 1790s Hull had about a tenth of the national trade, but rhis had risen to about half by 1805, representing, to some extent, the newer 'industrial' usage of whalebone for such things as brushes and umbrellas.

Similarly, Hull came to dominare the rrade in seal skins, taking half the national import in 1800, but then she withdrew a major part of her scaling efforts to concentrate on the more lucrative oil and bone trade. Sealing, in fact, was rapidly becoming a Newfoundland and South Seas affair, and Hull merchants were never as interested in the Southern Fishery as rhey were in the Arctic.

The amount of capital and effort put into whaling was very great. In 1790 rhere were 24 or 25 ships measuring between 6,000 and 7,000 tons, and worth perhaps £125,000; by 1805 there were 38 ships measuring over 11,000 rons, and in 1815 there were 57 ships measuring almost 19,000 tons and worth perhaps £300,000. They represented abour one-seventh of all Hull's shipping in 1790 and between a quarter and a third in 1815, though it must be remembered that whalers were not used exclusively in whaling and were to be found in both the coastal and foreign trades, and even in use as floating warehouses between voyages to the Arctic. They were the largest ships employed in Hull, with an average tonnage in 1790 of 298. They were also the most expensive, requiring not only better-than-average hulls, but also special strengthening to withstand the ice, and, usually, an expensive annual refir to repair the almost inevitable damage of the previous season.

The men who owned the whalers, or who organised the group of owners, were in the early days generally oil merchants, but many of the later owners were ex-master mariners from the trade itself—men like Charles Shipman, William Sparks, and Humphrey Foord, the most successful master in the 18th century. The greatest owners, however, were always firms such as Eggingtons and Boltons, who owned 'Greenland yards' where the blubber was refined. They did not own the whole of a whaler, but sold shares which were extremely popular investments among all sections of the monied classes, as well as with merchants and other people from inland towns. The larrer included Edmund Taylor, wharfinger of Halifax, and Benjamin Wilson, the Burton brewer, who had a share in a whaler of which Henry Hammond, one of Hull's leading 'shipowners', was

the leading of managing owner.

The first Greenlandmen were foreign, introduced, like those of Whitby, from Holland and Holstein, and rheir specialist equipment was Dutch. They, and their English successors, were protected from the press-gang by Greenland Protections, so high was their value in the eyes of a merchantilist-minded government. The whaling trade, like that in naval stores, also enjoyed official encouragement in the form of a bounty aimed at making Britain selfsufficient in oil (there was also a bounty on flax, which indirectly encouraged Hull's seed-oil industry). The value of the bounty was changed from time to time, but at its more usual 30 to 40 shillings a ton on whalers fitting out, it was intended not to add to existing profits hut to guarantee owners against the full burden of their vessel arriving home 'clean', or with severe damage to the vulnerable parts of her expensive equipment which underwriters refused to take on. Altogether, Hull received about half-a-million pounds in hounties in the period to 1815, which must have been a tremendous help to eapital accumulation in shipping at a time when new ships were desperately needed—and, of course, it helps to explain why men wishing to put all their capital into ships chose whalers as the most suitable investment! Owners occasionally argued that it was the bounty that made the trade, but, at least by the 1780s, the Treasury wisely disagreed, and we may follow them in attributing the success of Hull's whaling trade to the obvious skills of her masters and crews, and to the normal economic forces of demand and profit. Though allowances must be made for the inflation of the Napoleonie war period, there was a notable increase in the price of whale-oil, from around £24a ton in the late 1780s to around £30 by 1800, and over £40 in 1813.

Whaling was of immense value to Hull. It involved a huge investment in shipping which indirectly benefited all branches of trade and provided the base on which shipowning developed along modern lines. It provided the merchants and oil-men and masterowners with the full profits from the trade, instead of the commissions that were received on other imports. And the whaling fleet, the Greenland yards and the various subsidiary manufactures using whale-oil, whalebone and seal skins, kept the better patt of 3,000 people in employment in the early part of the 19th century.

(f) The Coastal Trade

Hull's hinterland would have been dull indeed had it relied solely on her foreign trade for those luxuries that were fast becoming necessities in the 18th century. It is a mistake to think of Hull as the 'European' port and Liverpool as the 'Colonial' port for the Industrial Revolution, for places like Sheffield got their sugar and their tobacco not from Liverpool or Bristol, but with their iron and wood, from Hull—and Hull had them coastwise from London.

We cannot emphasise too strongly the importance of the coastal trade in the early days of industrialisation. British and foreign goods alike made the coastal run—the only adequate system of long-distance 'internal' transport before the railways—and, contrary to common belief, a rudimentary national market already existed in the 18th century, with London secute in het position of national entrepôt. This is why London's trade was such a huge percentage of the nation's trade. If Hull did not trade directly with America or the West Indies on any significant scale, it was not because she lacked initiative, tuthlessness or capital, but rather because it was so much easier to concentrate on her own particular growth area and get everything else from London. In the coastal export trade London again took pride of place, partly because of her own large population, but also because she could send on to other English—or foreign—ports the products of Hull's hinterland.

Hull's position as the natural link between the metropolis and central England assured her a leading role in national coastal trade, a fact which Defoe recognised: 'the trade of tobacco and sugar from the West Indies, they chiefly manage by the way of London'; and, as we saw above, he thought Liverpool inferior to Hull because 'Liverpool has not the London trade' to supplement its foreign trade. The situation was not very different in 1781 or 1791, when more coasters entered Hull than entered any other outport, though by 1791 Liverpool, Newcastle and Hull were neck and neek in the trade. So far as coastal exports were concerned, neither Hull nor Liverpool, though immensely important, could compare for volume with the coal giants, while Newcastle's coastal exports exceeded even those of London by tonnage, though not, of course, by value!

Unfortunately we have no clear indication of the tonnage of coasters for most of the century, though the trend appears to have been favourable in the 1730s and in the late 1770s. By 1791 entries had reached 123,523 tons and, after a series of lulls during the wars, rose to 239,375 tons in 1825. Clearances were generally a little ahead of entries, standing at 114,165 tons in 1796 and reaching the phenomenally high figure of 261,401 tons in 1825, which was more or less the high point of the coastal trade before competition from railways and Goole began its depredations.

Something of the importance of the coastal trade to Hull may be judged from the fact that the inward tonnage of coasters was more or less the same as the ronnage of vessels entering Hull from foreign parts—an average of 41,935 tons and 51,582 tons respectively for the period 1766-72, and 108,261 tons and 100,000 tons for the period 1789-91. It was in the export trades that the really startling difference comes to light: the average tonnage of coasters clearing from Hull was more than double the tonnage in the foreign trade in 1766-72 (41,163 tons compared with 17,872 tons) and almost double in 1789-91 (100,054 tons compared with 51,812). The difference was not because Hull was sending more of her standard industrial exports along the coast than across the seas, but rather because there was always an important trade in foodstuffs which rarely entered into foreign trade. It is, for instance, a completely unexpected fact that the largest single consumer of coastal tonnage outwards in the second half of the century was the potato, which hy the seventies was exported literally by the fleet-load.

London was always the chief partner in Hull's coastal trade, though the proportion of ships bound there declined dramatically in the thirties, from about 70 per cent to a little over 40 per cent, where it stayed for the remainder of the century—a decline offset, to some extent, by the superior size of vessels engaged on the London run. Apart from London, no more than a dozen ports were regularly contacted in the first quarter of the century, and of these only Lynn, Wisbech and Newcastle were of any real imporrance. While ships adventured further as the domestic market expanded in the middle of the century, to trade with 49 ports in 1768, the bulk of trade goods continued to go to very few places—to Newcastle and Sunderland, Whitby and Scarborough, Lynn, Yarmouth and Wisbech. There was only one notable newcomer: Bo'ness/Leith. Between them, these ports only rarely (with London) received less than 80 per cent of the vessels clearing from Hull (Table 8).

Table 8
PRINCIPAL DESTINATIONS OF COASTERS CLEARING
FROM HULL

For	1703-4	1758	1796
London	310	318	578
Newcasrle	27	86	80
Sunderland	8	61	36
Whitby	14	42	18
Scarborough/Bridlington	5	24	13
Lynn	35	41	96
Yarmouth	7	15	53
Wisbech	29	15	89
Bo'ness/Leith	0	81	40
TOTAL	467	733	1300

Since foodstuff's played a prominent part in the coastal export trade, its volume was determined to some extent by harvest and weather conditions, and fluctuations were to be expected against a background of favourable trend. The hinterland was doubtless producing corn surpluses with the Neweastle and London (and, of course, foreign) markets in mind, and immense quantities of butter and cheese were sent to London throughout the century. Between 1706 and 1775 butter rose from 22,000 fitkins to 60,000 firkins, and cheese from 862 to 3,525 tons. Coastal corn exports at the beginning of the century stood at about 20,000 quarters, of which the bulk was oats; by the 1780s this had risen to an average of 100,000 quarters, of which 85 per cent was oats. Malt and beans were both approaching 10,000 quarters in 1706, and peas and mustard flour went to many places, together with small quantities of eggs, mushtooms, ketchup, honey, tongues, crab-claws, caviar and sturgeon. As the century progressed, Hull also grew in starure as a re-exporter of wines and spirits, snuff and tobacco, and a mass of relatively unimportant commodities making up a grocery trade with most of the east coast ports. Raw materials from the hinterland were not, on the whole, exported, with the exception of lead, flagstones, plaster and, in the last quarter of the century, 'inland coals'.

Manufactured iron goods were of great eonsequence by the middle of the eentury, going especially to East Anglia, and ranging from an array of agricultural implements, knives, shovels, nails, sad-irons and kitchen utensils to larger things such as chimney-backs and anvils. Guns were regularly sent down to the arsenals and naval dockyards, no fewer than 7,460 travelling eoastwise during the American Revolutionary War, together with 10,000 'shells'. Vast quantities of pottery entered the trade after the middle of the century, and cloth, from both Yorkshire and Lancashire, was just becoming really important when out trade figures cease. There were, finally, a mass of miscellaneous goods: stocking-frames sent up to Scotland, ploughs down to East Anglia, church hells to Boston, fish-leaps to Aberdeen, 'Daffy's Elixir' to Saltfleet, brushes

everywhere.

Coastwise imports fall roughly into three divisions: taw materials, coming chifly from the coal ports; corn and wool, coming from East Anglia; and luxuries and general British and foreign

goods, from London.

At least until the middle of the century the majority of coasters entering Hull from the outports came from the northern ports of Newcastle, Sunderland and Stockton, but it must be emphasised that even then they were not always full of coal. While Sunderland was the chief supplier of coal, ships from Newcastle were more likely to be filled with salt and hides, bones, old rope, rags and paper. Coal was a mere 2,000 chalders in 1706, 5,500 in 1728, and by the middle of the century, when Hull was beginning to export coal, the coal trade from Sunderland was dying away, except for a few small shipments for re-export to the Baltic. Far more important, in the second half of the century, was the import of northern steel,

assorted ironmongery, various metals and edge tools; and Newcastle was the principal source of huge quantities of glass and glass bottles. These goods required nothing like the shipping space previously occupied by coal, and the declining volume of the northern trade is reflected very well in the shipping figures (Table 9).

TABLE 9
PRINCIPAL SOURCES OF COASTERS ENTERING HULL

From	1706	1758	1796
London	80	226	553
Newcastle	42	59	53
Sunderland	71	45	29
Whitby	0	20	50
Grimsby	3	22	24
Lynn	12	56	136
Wells	0	13	34
Yarmouth	3	27	79
Ipswich	0	6	15
Bo'ness/Leith	0	9	38
TOTAL	219	553	1,346

As the hinterland developed, the list of raw material suppliers grew longer, and by 1775 there were 26 ports which sent their own speciality. Exeter and Poole sent clay, and Poole eventually added whale-oil; iron ore was brought round from Campbelltown and Ulverstone, and kelp from Oban; vitriol came from Prestonpans, and woad from Saltfleet; and, as the great building boom got under way, paving stones were imported from Montrose and slates from Cumberland.

One of the chief raw materials brought coastwise was wool: 1,476 cwt. in 1706 and 61,363 cwt. in 1775. Some of it came from specialist wool ports such as Aldborough, Blakeney, Wells or Grimsby—the latter sending more wool rhan any other outport. Bur the bulk of the wool came from ports which shipped orner things as well: Ipswich, Newcastle, Yarmouth and, above all, London, which sent 45 per eent of the rotal wool imported in 1782. The east coast ports also sent a variety of other agricultural produce. Tiny places like Wainfleet in Lincolnshire sent oats, skins, horns and bones, and Dundee senr salmon; but most important were the East Anglian ports, which supplemented their wool shipments (30 per eent of the total) with fresh fruit (apples, pears and plums), corn and a variety of oil-seeds (hemp, rape and linseed) of which the Fens around Wisbech were the best producers. Yarmouth in particular was a valued source of herrings, and Yarmouth, Lynn and Ipswich were able to send on the wine, cork and foreign iron which they had obrained in exchange for rheir fish in Catholic Europe and slaveowning America. Almost all the fish brought into Hull came from

boats owned and operated from one or other of the fishing villages and towns along the east coast—Clecthorpes, for instance, was the leading fishing village in the Humber. Hull had no fishing industry of its own in the 18th century, although the corporation gave bounties for fish brought to the town.

The trade with the east of Scotland falls into three categories. The first, in time, was in things recognisably Scottish: hundreds of thousands of yards of linen, hundreds of tons of kelp, and rhousands of gallons of whisky, coming from almost all the minure 'ports' of Scotland, though chiefly from Leith. Leith also gained as a trading partner with the opening of the Forth and Clyde canal in rhe seventies, which meant that at last it was profirable for Hull merchants to seek the second category of goods-colonial producein Glasgow. The third category was the most important, consisting of industrial products from the vitriol works of Prestonpans and rhe forges of the Carron Company. Carrons employed Spence & King, the Hull ironmongers and plane-makers, as their agent for an impressive range of wrought- and cast-iron goods, and who probably also sent the steel and some of the meral goods which arrived from Prestonpans or Leith. It is possible, roo, that some of the cargoes of metal goods arriving in Hull from Newcastle originated in the Forth

ports, but we have no means of telling if this was the case.

In the second half of the century the east coast was alive with ships heading for or from the Humber, but very few of them bothered to make the long journey through the English Channel. Notwithstanding Hull's willingness to accept colonial produce second-hand, Liverpool and Bristol were never able to build up a direct trade with their less fortunate rival on the 'wrong' side of the island. Few ships came from Bristol, and those that did usually carried British spirits, spa water, cider and other West Country delicacies. Ten times as many ships came from Liverpool, carrying not the wealth of the Indies but the salt of Chesire, and while ships brought kelp from Oban and iron-ore from Campbellrown, none brought tobacco direct from Glasgow. The truth is that Hull had no need to search further than London for colonial produce or, indeed, for the produce of the south or west of the country. To some extent this was owing to the way in which the coastal trade was organised. Vessels normally sailed at regular intervals on fixed routes, carrying a mass of small parcels consigned to dozens of merchants, except, of course, in the bulky raw materials tradeskelp and coal, for instance. The Peases sent out ships especially to bring cargoes from Danzig or Kömigsburg, but never a vessel round to Bristol for the oil-seeds or white lead which they purchased there; they had them put into a vessel bound for London, where they were transferred to another bound for Hull. The 'regular trader' was already well established in the seventies, and many of them appear in the trade directories published towards the end of the century. Routing everything through London may appear cumbersome and expensive at first sight, but ir was probably quicker-and rherefore less expensive—than waiting for a vessel to fill up, or under-using it, while the development of the time-table trade probably helped to reduce inventory costs for both manufacturers and merchants.

It would be tedious to recite here the contents of the trade with London. All that we can do is to emphasise yet again its vast size, and to point to a few of the leading goods, ignoring literally hundreds of commodities that came in small or large volume appropriate to the demand of the hinterland. The rise of the London trade is obvious from the number of coasters arriving from there: 80 in 1706, 226 in 1758 and 553 in 1796, corresponding roughly with the general rise in trade throughout the country as the great colonial trades developed.

The commodity imported coastwise in largest quantity was probably sugar, of which 767 tons arrived in 1706 and 9,389 rons in 1775; the second was prohably beer, of which the great breweries of the metropolis sent over 300,000 gallons in 1775, passing on its journey the Burton brew going south. Every imaginable variety of wine arrived in small quantities to complement Hull's considerable direct imports, and there were thousands of gallons of spirits of both colonial and British origin. The most valuable commodity may have been tohacco, of which half-a-million pounds were imported in 1706 and three-quarters of a million in 1775. From small beginnings in the early years of the century, there was a tremendous advance in both the volume and variety of the grocery trade: dried fruir, oranges, nuts, spices, rea, coffee, cocoa and rice. In some of these goods the foreign and eoastal trade supplies are clearly coinplementary and move in inverse ratio. For instance, in the first half of the century the direct import of oranges fell away, while the coastal import increased considerably; and at the end of the century the dependence of Hull on the eoastal fruit and dried fruit trades deelined as an increasing supply was imported directly from France

London did not supply only luxuries or intrieate manufactures such as watches and musical instruments; there were also raw materials of every kind, from all over Brirain and from abroad: oil, tar and turpentine, tallow and grease, skins and hides, wool, hardwoods and an immense range of chemicals and dye-stuffs. All the tin and copper imported coastwise came from London, together with Plantation and English pig iron, and a few hundred tons of Baltic iron which had failed to find freight in ships bound direct for Hull, or which was bought from London merchants to supplement direct imports. Linen cloth of Baltic or Scottish origin was to be found in almost every coaster and there were also small shipments of linen yarn, flax and, of course, the cotton wool rhat was used by the Strutts and other cotton people to the east of the Pennines.

and the Mediterranean.

It is clear from a detailed study of the foreign and coastal Port Books that there was nothing required in the hinterland that could not be obtained in the port of Hull, either directly from abroad, or indirectly through London, and it is equally clear that it is not entirely satisfactory to rhink in terms of foreign trade alone when assessing Hull's place as a supplier of goods to the areas of industrial advance. As we have seen, the coastal trade supplemented and complemented the foreign trade, and the growth in trade after 1783, though we have no details of the total of goods involved, is probably best measured by using the total tonnage of vessels entering the port in the foreign and coastal trades together. Since the method of calculating tonnage was changed by the Customs in 1786, and their figures do not form complete runs anyway, it is best to use the figures drawn up by the Dock Company of measured tonnage paying dock duties at Hull (Table 10).

TABLE 10

THE TONNAGE OF FOREIGN-GOING AND COASTAL VESSELS PAYING DOCK DUTIES AT HULL

(five-yearly averages)

177 5 -9	99,822
1780-4	98,577
1785-9	135,313
1790-4	174,170
179 5 -9	183,546
1800-4	195,799
1805-9	122,368
1810-14	208,047

THE MERCANTILE COMMUNITY

The trade of Hull expanded as a natural consequence of the industrialisation of her hinterland. But many other things had to change before trade could expand, or were changed as a result of that expansion. Some were 'external' factors, such as the opening up of the Baltic lands or the building of an effective internal transport system; others were 'internal' factors, such as the reorganisation of the mercantile and financial community, the development of the shipping industry, and the building of docks.

(a) The Merchants

The merchant was the king-pin of commerce. At the beginning of the 18th century there was no direct contact between producer and customer except in the coastal trade; it was the merchant who sought out supplies of raw materials, and it was the merchant who sent samples and pattern books to his contacts in Amsterdam, Danzig or St. Petersburg in an attempt to sell goods made by his friends in Sheffield or Manchester. It was all a matter of connexions—or correspondencies, as they were called. Once a metchant had built up a business it was virtually impossible for anyone else to take it from him, so long as he played fair with his correspondents; and connexions were inherited, as well as laboriously accumulated, A mixture of good correspondents, good factors and goodwill placed a great merchant house in an unassailable position, and in Hull that position was encouraged and preserved by the division of almost all the available quay space into private properties owned by the oldestablished houses. Thus, the bulk of trade in the early part of the century was concentrated in few hands. Of the 116 individuals making shipments outwards in 1702, 94 made fewer than ten shipments, while only seven made more than 40, and of these the leading merchant, William Crowle, made eighty-five. The many men making one or two shipments were hardly of the same species as the Crowles, Thorntons or Wilkinsons in the export trade, or the Maisters, Wilberforces and Moulds in the import trade. Half the kersies were exported by two men and half the lead by four men in 1702; over half the iron was imported by two men in 1751, and a third of it by a single firm—Williamsons—in 1768. If we add together the various commodities, there were perhaps two dozen merchant firms at the beginning of the century who made up what might loosely be described as the merchant aristoctacy, pethaps a dozen more at the end of the century. There were a few more firms that could be described as middling, firms that were growing with experience and inheritance and might one day be great, or firms which, for one reason or another, had teached the peak of their performance.

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It was essential that the trading capacity of the mercantile community should increase during the century, especially towards its end. This happened in two ways. Firstly, the leading houses—and their lineal descendants—expanded their business, becoming greater and richer in a blaze of mercantile glory that led most of them into undistinguished retirement in the early 19th century; and their number increased as opportunities increased for astute men in the middling rank of merchants. Secondly, at the same time, and perhaps more important, there was a noticeable increase in the number of middling merchants clutching at the coar-tails of the leaders: men who had made their way de novo since the beginning of the century and had not yet reached the stature of the old firms. It was not so difficult to be middling, but to become great was an extraordinary achievement.

One of the surprising things about Hull was the longevity of its leading merchant houses, and the absence of men known to have made good from nothing. The only way a man could be assured of rising in the world was to enter and exploit an existing trading situation, usually one created by his family or the master to whom he was apprenticed. To him who had the silver spoon all was given: but the man who fondly imagined that he could establish connexions with Riga or New York from nothing was likely to lose all that he had. Joseph Pease at the beginning of the century and John Simon Brandström ar the end were able to establish themselves from scratch, but only on the basis of their existing overseas connexions—Pease with Holland and Brandström & Küsel with Sweden. Most men rose with an existing house, or amalgamated with another of the middling rank. Some of the new leaders had been gentry apprentices; almost all of them had capital to ease their path. Few were as fortunate as Richard Terry and Thomas Thompson, who started out as merchants' clerks and ended up running the businesses in which they were originally salaried employees. Most self-made men made little, though their sons might build on their fathers' start.

Most merehants at the beginning of the century worked in their family groups; families should stick together to help each other, Joseph Pease was told by his father, who directed the family business from Rotterdam in the early days. But hy rhe middle of the century it was already common for a merchant to take a partnerthough usually, at this time, an informal partner by marriage. Soon, however, the partnership had become the most common form of business organisation, among houses large and small. It was not simply the desire to secure the maximum working capital, rhough this was obviously imporrant; it was the only way to assemble enough men to tackle the increasing complexity of trade. Above all, the uniting of firms and interests tended to have a geometrical rather than arithmetical effect on the connexions on which so much depended, and this was particularly valuable for those who wished to build up a reasonably big business. Biggest is not always best, but it had certain advantages in trade as well as industry.

Some firms, such as Wray & Hollingsworth, were working partnerships. Others, such as Wilberforce & Smiths, began as working partnerships and eventually became 'capital' partnerships, with none of the principals taking a serious hand in the business, which was left to the junior partner while his seniors danced at Beverley or sat at Westminster. Some partnerships were quite open and well-known; others were already sleeping partnerships, such as Sykes & Co., half of whose capital was invested by then who took no active part in the business. It follows that the rise of the partnership must have gone along with a more careful accounting system, and eventually a complete separation of the private and business finances of merchants. In many respects this change was dependent on the emergence of the bankers in the middle of the century.

Although trade was conducted on credit, eredit was based on capital assets which every merchant required. It was said of Joseph Swahy, in the 1780s, that 'his fortune is moderate and will enable him to appear in trade with a degree of credit'. The same might have been said of all merchants, a fact noted many years earlier by Defoe: 'nor have the merchants of any port in Britain a fairer credit, or fairer character, than the merchants of Hull, as well for the justice of their dealings as the greatness of their substance or funds for trade'. In the early days the capital employed in trade was generated in trade; merchant profits and respectability were the key to creditworthiness in Amsterdam, and most of the larger firms were using fortunes inherited from the 17th century, supplemented wherever possible by dowries. Poor young Joseph Pease, to his father's disgust, married for love and £300, but Alderman Henry Broadley, a younger son with only £6,000 of his own, married £30,000 in the middle of the century and so secured himself a perfect independancy'. Though legacies were common enough, they were usually taken as annuities, with the capital remaining in the family stock. Relatives with separate funds were encouraged to entrust them to the merchant house, and merchants sometimes sold annuities or borrowed money from their fellow merchants. A few men, such as Henry Etherington and Francis Bine, made their fortune at sea before retiring to land to exploit the connexions they had built up as master mariners, but there were not many in this category; they were more likely to invest their money in stocks or ships. However, as we have indicated, the most significant development was the building up of greater concentrations of capital through the amalgamation of merchant houses and the creation of sleeping partnerships. There is surprisingly little evidence of moncy entering Hull from outside sources. A few younger sons of gentry brought small capital stocks with them. but the only man known to have brought substantial sums of money into Hull was Abel Smith, the banker's son from Nottingham whose family eventually put large sums into Wilherforce & Smiths and Sykes & Co. and, through their bank, into Hull trade in general.

Hull merchants did not, in general, specialise in single commodities. Obviously men made their names, and houses built their fortunes, on specific things such as iron or deals, and some engaged only in the import trade and others only in the export trade, but with few exceptions merchants were to be found both importing and exporting a wide range of goods. Maisters are best known for their iron imports in the first half of the century, but they also imported tar from Sweden and deals from Norway, and exported leather and bricks to Scandinavia, lead to France and corn to Spain; and at the end of the century Henry Maister was the Deputy Governor of the Hull braneh of the Fellowship of Merchant Adventurers of England residing in Hamburg. Williamsons, who eventually took over the Maisters' leadership in the iron trade, were also the principal exporters of most things in the second half of the century, with immensely valuable catgoes consisting (to quote but one example) of dozens, bayes, shalloons, cotton velvets, ale, ted lead, vitriol, ironmongery and tin plates. Brandström & Küsel at the end of the century were also prominent in the iron trade, having come over originally from Sweden to compete with Hull merchants in their home market, but they were also to be found importing currants from Cephalonia!

At least for the bigger firms, specialisation—so far as it existed —was chiefly regional, which is really another way of saying that most merchants traded anywhere within the restricted region that Hull had made her own. The leading merchants traded with all the ports of northern Europe in anything that their correspondents thought fit, and it should be emphasised that-within Hull's restricted sphere—trade was a matter of connexion rather than specialisation. If an inland correspondent of Wray & Hollingsworth, who were basically interested in iron and timber, wanted staves, feathers, bristles or scrap iron, he did not seek out a new supplier, but simply wrote to his 'friends', just as Manchester correspondents of Joseph Pease sent him their pattern books in the middle of the century though he had no correspondents in the countries to which they were to go; he simply sent them on to his Amsterdam connexions, who had. In trade, as in the rest of life, the important thing was not what you know, but who you know; and the merchant who knew enough people could take his percentage on almost anything.

Of course, what in the Hull context is described as a 'general' merchant would in the London context become a narrow specialist, so far as the regional distribution of trade was concerned. Hull did have a small number of people who broke free from this undue concentration of interest, mostly men trading with America. William Welfitt, the leading tobacco merchant, Christopher Scott, and Hamilton & Edge, the tar merchants, were fairly easily distinguished as American specialists, in that their names appear regularly against American entries in the Port Books, but they also traded in anything they could, and, as we have seen, regarded whaling as a reasonable

offshoot of their normal activities.

The men who came nearest to eommodity specialisation were a few firms importing for their own industrial needs—such as Delamotte, Beel & Co., the sugar-refiners, who imported only raw sugar—or firms set up as agencies for merehants elsewhere—such as the Hull branch of Deponthieu, the yarn merchants; and, of course, the wine and brandy merchants. Wine presumably needed a certain amount of specialised knowledge, but again the larger merehant houses were to be found imporring wine from reliable shippers and, with one or two exceptions such as the Voase house, the specialist wine merehants were relatively small concerns.

Towards the end of the century, it seems likely that increased trade led to an increasing specialisation among merchants, though specialisation was far from complete, and entries in the local directories must not be taken as indicating a man's only—or, indeed, his chief—occupation. In any ease, by 1790 any merchant who gave any thought to his entry in the directory was likely to enter himself as 'Gent.'—except for the really important merchants who lived out in Cottingham or West Ella and called themselves 'Esq.'. There is no substitute for the Port Books in analysing the activities of merchants after 1783, so we can make no dogmatic statement about the onset of specialisation. It certainly seems likely, however, that the trade boom encouraged it, especially in such things as wine, while obviously it was present in the growing American trade—though not in the British North American trade, which was in the hands of

men already deeply interested in Baltic timber.

The most significant result of the Industrial Revolution, so far as the merehant class was concerned, was the deeline of the export merchant. It was still necessary for the merchants of Hull to assemble raw marerials in Europe and America, but in the export trade there was a growing tendency for direct contact to occur between producer and customer. Already by the eighties Hull merchants were complaining to the Customs officers that inland correspondents were forwarding goods to them for shipment without even acquainting them with the contents of the boxes and bales, which led to delays in Customs procedures. The great age of the general merehant was over, or at least nearing its end. Most of the great merchant houses of the 17th and 18th centuries began to depart to greener pastures in the last years of the century and the hirst quarter of the 19th, and they were not replaced by men of similar stature. Hull was to see no more Maisters, Mowlds or Wilberforces. Williamsons in 1816 were boasting that they had their mercantile correspondence back to 1660, but soon they-and their correspondence—had gone. If the past belonged to the merchant, the future belonged to the shipowner and the industrialist. Though the timber merchant continued, in many commodities the merchant became simply the shipper, consignee or financier for men no longer interested in his finer mercantile skills.

(b) The Bankers

One of the greatest of the old mercantile skills declining during the century was the ability to move money to pay for trade goods, particularly, so far as Hull was eoneerned, to settle the large adverse trade balance with the Baltie. Though bullion was still moved to the more backward areas at the end of the century, most payments were made by paper and book transfers, the whole based on an elaborare system of eredit. No one actually paid on the nail for anything, so long as he had a friend in Amsterdam on whom he could draw by bill of exchange; and by writing a 'usance' period into the bill, delaying its payment until the goods concerned had been disposed of, the merchant was relieved from the necessity of laying out large sums to cover goods in transit.

Although bills of exchange could be used in a number of different ways, the basic principle was simple: merchant A, having sent goods worth £1,000 to merchant B, and imported goods for a similar amount from merchant C, sent to C a bill of exchange with the wording: B—at thirty days sight pay C the sum of f_{1} ,000, for value received'. In practice, C did not wait till the usance period had expired, but sold the bill to someone wanting to transfer £1,000 elsewhere, and so bills went into circulation, gathering respectability from the names subscribed on the back, like the old bank of England 'fivers'. Merchants accumulated bills drawn on people in Holland or Germany in order to pay their debts in Sweden or Prussia, and some of them acted as clearing houses, or discounters of bills. It was obviously impossible for merchants to buy enough bills to send to the Baltic, and it was for this reason that they had to have close connexions with Amsterdam, where 'acceptance houses' allowed Hull merchants to draw bills of exchange on them, and so make use of credit accumulated by the Dutch in their extensive Baltic carrying trade.

By drawing on a merchant who had not previously received 'value', a merchant was, in fact, raising credit. Joseph Pease regularly did this in order to build up his seed-crushing business, and his cousin Clifford in Amsterdam, who usually accepted his bills without question, called a halr for a time: 'your engaging so deep with other peoples money...would cause your entire ruin...we must go open hearted with you and tell you plain that we'll not come under further acceptance, for if you cannot keep yourself in bounds others will be forced to do it...'. But Pease always mer his obligations, and that, in fact, was all a merchant had to do. Unless some catastrophe overtook him, he simply went on shunring credit from one account to another.

The ability to adventure successfully with other people's money is the hallmark of the millionaire, and Pease certainly had the Midas touch. By the middle of the century he owned the largest private staith in the harbour and was the rown's leading industrialist; and he had also taken to discounting bills of exchange for colleagues without his intimate connexions with Holland, where all the Pease boys

were trained and the girls spent their holidays till their Dutch was better than their English. Pease decided to formalise his position in 1754, when he opened the town's first commercial bank and met—as he told Alderman Wilberforce—with far more success than he had ever expected. Almost all the early accounts in his ledgers were bill accounts, though by 1760 he was beginning to build up a fair number of merchants' current accounts, and was even attracting small depositors and handling the tax and Customs accounts for the port and the East Riding.

After about ten years as the only Hull bankers (two other merchant houses were experimenting with banking when they failed in the 1759 financial crisis), Pease & Co. were joined by Edmund Bramston, merchant, goldsmith and alderman. Despite its ambitious title, Bramston's Hull Commercial Bank remained a much smaller concern than Peases', even after 1791-2 when he was joined by the Moxons, one of the town's leading merchant and shipowning families. (The bank went into liquidation and closed at the end of the Napoleonie War.) The third, and most important, bank in Hull was Smiths & Thompson's, opened in 1784 on the basis of the great Wilberforce & Smiths house. Thomas Thompson, lately chief clerk, was in charge of the merchant house, the bank, and the Lincolnshire estates of his senior partner, Robert Smith, Lord Carrington, who was said to have been the only man in the 18th century to be given an English peerage while still actively engaged in trade. Yet another hank springing from a great merchant house was the East Riding Bank, which was a partnership between R. C. Broadley, one of the greatest—and richest—of merchants, and Sir Christopher Sykes, whose landowning fortune had been partly based on Hull trade. In 1802 Sykes retired from the bank and his place was taken for a time by the Leeds bankers, Joseph and William Denison, 'under the firm of R. C. Broadley & Co.', though the title of East Riding Bank remained. The last Hull bank founded in the 18th century was Pease & Harrison's. It opened when Thomas Harrison, sometime chief clerk of old Joseph Pease, and junior partner in an earlier firm of the same name since Joseph's death, was dismissed following the discovery of dishonest and disloyal practices. He set up in rivaly to the old firm under the same name, having secured as his partner R. C. Pease, the family reprobate, who had been considered unsuitable for banking because of his addiction to gambling—among other things.

The influence of the banks was soon felt throughout the Riding and in Lincolnshire, as well as in Hull itself. The East Riding Bank, as its name implies, was active in several centres, with Sykes acting as senior partner in Malton and Broadley in Hull. Pease established a number of branches, with local partners, in Barton-upon-Humber, Brigg, Beverley, Malton and Whitby. And Smiths & Thompson's, while having no formal branches, had an agent in Howden and customers all over the East Riding and north Lincolnshire—often visited by Thompson in person or by the chief cierk, riding horse-

back with a brace of pistols at the ready.

The first—and, for Hull, the most important—change brought about by the bankers was the revolution in bill-broking. In a very short time Pease's Amsterdam and London agents had become the common agents for the transmission of money for all his customers. Merchants receiving bills of exchange from abroad no longer hoarded them, but gave them immediately to Pease, who discounred them; and when they wished to make payments, they drew on him, or on his authorised agents, or he gave them bills which he had himself drawn on those agents. The result was a great simplification of international financial transactions at a time when those trans-

actions were multiplying beyond all previous experience.

The bankers similarly eased the problem of local payments, for coin was short and a merchant might find it easier to make a payment to Danzig than to Driffield. Pease's early bank notes were simply private promissory notes, similar to those any merchant might give to a creditor, but they had the advantage of creating credit to stimulate the local economy. No more than £8,000 worth of notes appear to have been issued by Pease in 1758, when the notes still bore their individual names and values, written by hand. It is not clear when a printed circulation began, but it was probably before 1764, when Pease put almost £46,000 in notes into circulation. By the end of the century, when Pease's note issue exceeded £100,000, and Smiths & Thompson's was probably a little larger, notes were firmly established as the media for all local payments of any significance, and in the financial crises of 1793 and 1797 all the local merehants and gentry rallied behind the bankers and declared their willingness to accept notes issued by any of the Hull banks 'in all payments whatsoever'. Ir was in the interests of the community as much as that of the bankers that notes should be respected not simply because of the trouble if the present ones were rejected, but because notes had become an indispensable part of commercial life.

The bankers-also simplified the raising of money, especially for temporary purposes. Merchants began to pay bills drawn on them when they appeared in Hull, accepting credit from the bankers instead of froin rheir fellow merchants. Some used overdrafts to pay for goods before they were sold, and others to pay taxes or customs, or to involve themselves in speculations. The first Sykes & Co. account with Smiths & Thompson's bank was used entirely for the payment of Customs duties and was overdrawn by £7,310 before

any repayment was made.

Some merchants borrowed to expand rather than to maintain their business, and this may be one clue to the rise of a fairly substantial number of 'middling' houses in the last quarter of the century. But the more important people also borrowed heavily. Henry Etherington had £10,000 from Pease in the 1770s; one of the Thompsons had £5,000 from Smiths & Thompson's in the 1790s and another had £6,000 from the East Riding Bank in 1811-13; Sykes & Co. had £16,000 in 1790 and Wilberforce & Smiths had £35,000 in 1792 from Smiths & Thompson's; and the Maisters

were the heaviest borrowers from the East Riding Bank in the early nineteenth century.

One great advantage of the merchant's current account was the opportunity it offered for the total separation of the private account from the business account, which was essential when partnerships developed in the middle of the century. Every halfpenny of profit was now withdrawn from the business, and sudden emergencies, which previously would have demanded an injection of 'private' funds, were now covered by overdrawing the current account. Thus, to some extent, merchants were freed from the immediate effects of trade fluctuations, and from the periodicity of payments to the Baltic, which fell due almost entirely between February and May.

The money which bankers used to support trade and industry was not drawn from private deposit accounts, which were few in number in the early days and of small individual value even at the end of the century. They belonged chiefly to widows and retired people with less than £100—that is, with too little money to invest properly. For the richer people, the account was often little more than a stockbroker's account, with entries limited to purehases of stock and payment of dividends. Nor did very much of the money come from the capital of the banks, which also remained small. The chief sources were the fiduciary note issues and the current accounts of merchants, institutions and landowners.

About the cumulative value of the note issues little can be said because no adequate records survive, but details of current accounts are to be found in both the Pease and Smiths & Thompson general ledgers. Towards the end of the century many men kept credit halances of several thousand pounds, making a toral at Smiths & Thompson's January 1786 balance of about £18,000. By January 1800 this had soared to over £275,000. The bulk of this was merchants' money, but there were many institutions whose balances may have been more stable. Most valuable of all as a source of credit, first to Pease and then to Smiths & Thompson, were the Customs and Tax accounts, which amounted to £137,375 in January 1800, and which almost always contained a clear £10,000.

The bankers, hy drawing together the various sums, large and small, that had previously remained idle, provided an invaluable service to those who wished to borrow. What remains ro be seen is whether they were attracting money into the town or sending ir out. The hanks should have provided a vehicle, if one was required, for the movement of agricultural money into trade and industry. Smirhs & Thompson's certainly went out of their way to attract rural customers, and in 1793 almost half their toral number of customers were residing outside the town and were responsible for depositing a little over £40,000, the largest accounts belonging, in fact, to Lincolnshire rather than Yorkshire gentry. However, the importance of the 'country' declined rapidly for Smiths & Thompson, perhaps because they did not have formal branches to face the increasing competition from the Pease and East Riding branches. The East Riding Bank certainly appears to have been making heavy

loans to merchants, but it is by no means clear that the money so involved came from the Riding as opposed to the town itself.

While on the one hand we have no real evidence that Hull was drawing vast sums from agriculture into the town, we do have evidence pointing to relatively large sums going from town to country. The various branches of Pease's in Malton, Whitby, Barton and Brigg appear to have been offering a service to the country rather than raising money there for the Hull headquarters, and Smiths & Thompson made a number of heavy loans to country customers that amounted to half the total country deposits in 1793. Moreover, bodies such as the Anlaby Turnpike Trust and the Market Weighton Drainage Trust borrowed from Hull bankers. At the same time, individual merchants were investing heavily in agriculture. Many bought land for short-term investment, to hold idle funds or make a quick profit, as the Sykes did when they bought land in Melton and Ferriby for £4,500 in 1769 and sold it at a profit of £3,250 in 1772! Others bought land to gain through 'improvement' as the Agricultural Revolution swept aeross the Riding and Lincolnshire. Edmund Bramston, for instance, was one of the three men petitioning for the enclosure of Roos in 1782 (Mark Sykes was another), and the enclosures of Spaldington, Walkington, Coniston and probably many other places were partially financed by Hull bankers.

A number of merchant families bought extensive estates over a period of several generations, though it must be stressed that many families of equal wealth and standing thought there were better things to be done with money than sink it in land—except, of eourse, for the inevitable 'seats' that were to be found in every village for miles around Hull. The Peases thought it better not to buy land, and less than 20 per cent of J. R. Pease's income came from land (including his Manchester property) in the 1790s though his banking rivals Sykes, Broadley and Smith built up exceedingly valuable estates. The Broadley estate papers also reveal other, earlier, merchant landowners, for at one time or another they purchased the whole or part of the estates of Andrew Perrott, James Hamilton, Joseph Outram and Charles Pool, Another well-known large estate was that of the Maisters, who through a fortunate gentry marriage inherited property in Owstwick, Burton Pidsea and Bempton from the Tymperons, to which they added their own purchases in Winesread, Ottringham, Weeton, Welwick, Skeffling, Patrington and Wood Hall. The Winestead and Patrington land alone was worth over $f_{100,000}$ at the end of the century.

Of the investors of lesser standing we have only fleeting glimpses. Sir Henry Etherington had land in Paull and Hatfield in the Isle of Axholme (though he preferred to live in High Street in his old age, chatting to the porters and looking out for ships from his attic skylight); Sir Samuel Standidge held part of Thorngumbald, where he tried to spread a leaven of Hull's nonconformity, and the 'New York' farm near Preston which he had bought in the days of his youth out of the profits of a single voyage to America. A number

of merehants looked over the water, to Lincolnshire. George Crowle obviously had a bargain when he paid the trustees of the bankrupt Duke of Newcastle £21,500 in 1751 for land previously mortgaged for £31,000. Robert Smith bought the whole of Humberstone and some 400 acres of Wintringham—the latter costing around £85,000, and William Wilberforce had land next to his partner's in Wintringham, where they endeavoured to build a pier around a ship called the *Mastbaum*, which had sunk in Hull dock but was raised by them and towed across the Humber and sunk again.

The list of investors in the country around Hull, could we construct it, would doubtless include most of the leading merchant houses, though it is not implied that their investments were all large, permanent, or, indeed, successful. Even in 1800 many merchants still preferred more liquid and lucrative assets than land but it would appear, on present evidence, that more money was leaving Hull than was entering it. In other words, landed wealth was not subsidising trade and industry in Hull to any significant extent, but trade did provide some of the capital required for the great agricultural improvements of the second half of the 18th century. This, of course, is what one would expect. It would have taken an immense number of unimproved Wolds agres to yield an income which even a moderately wealthy merchant would have deemed satisfactory, and it took a fair injection of capital before the agricultural industry of rhe East Riding as a whole reached its full productive capacity in the 19th century.

THE MECHANICS OF TRADE

Three aspects of the transport revolution played a part in Hull's development in our period: the extension of navigable waterways, the building of docks, and the expansion of the mercantile marine.

(a) Waterways

Apart from the corn, coal and provision trades, Hull had almost no contact with the surrounding countryside. Her customers and her suppliers were deep in the hinterland, approachable only by the navigable waterways flowing into the Humber. The rivers, and later the canals, were as essential for the trade of Hull as they were for the industry of the West Riding or the Black Country, and her

trade expanded as the waterways were extended.

Hull's prosperity in the 17th century had been built largely on the natural waterways, such as the Ouse, which was navigable to York and which in 1698 was said to carry 'great quantities of woollen manufactures, lead, butter, corn, rape-seed, tallow and several other commodities, the product of this and the adjacent country'. In the early years of the century the Aire and Calder Navigation reached Wakefield and Leeds and tapped the woollen and worsted industries of the West Riding more directly, saving considerably on transport costs now that cloth no longer had to go overland to York. In the same period, the Don was improved beyond Doncaster, and the Trent as far as Burton, whence goods were carried overland to Birmingham. Since the shallower reaches of the rivers could take only flat barges, Airmyn on the Aire, Thorne on the Don, Stockwith and Bawtry on the Idle and, above all, Gainsborough on the Trent, flourished as trans-shipment centres. Some had their own merchants, like the Dawsons of Bawtry; most had their wharfingers, like the Flowers of Gainsborough, holding stocks of goods for Hull merchants. Stockwirh, Bawtry and Gainsborough were the major centres for the collection of goods from the West Riding and the the Midlands: Bawtry, said Defoe, was 'the centre of all the exportation of this part of the country, especially for heavy goods, which they bring down hither from all the adjacent countries'. Less spectacularly, to the north of Hull the more or less navigable river Hull served Beverley, and to the south the Ancholme meandered though the potentially rich agricultural districts of northern Lincolnshire, and the Trent and the Foss ran to the centre of the county.

The growth in trade in the twenty years before 1783 might be seen as a logical outcome of the sequence of canal building which began in the middle of the century as industrialists and landowners combined to provide themselves with better communications. Sheffield—or, rather, Tinsley—was reached by canal in the 1750s (and incidentally became the new route to Manchester); Loughborough, Louth and Brigg were reached in the 1760s; the Aire & Calder Company's Selby Canal, the Chesterfield Canal, the Grand

Trunk Canal, the Huddersfield Canal and parts of the Leeds—Liverpool Canal eame into operation in the 1770s. The opening of the direct water communication with Staffordshire produced what was, perhaps, the most spectacular rise in any of Hull's trade goods—

that in pottery exports.

Hull was completely aware of the contribution that canals were likely to make to her economy. The corporation petitioned, for example, in favour of the Ure extension of the Ouse in 1767; they subscribed £500 towards the Selby Canal; and when they supported the Fazely and Birmingham Canal in 1782 they rightly described it as 'a means of extending trade and commerce between the said port of Hull, and the northern kingdoms of Europe'. So far as trade was concerned, the more canals the better, and individual Hull merchants were to be found among the subscribers to canals, led by J. R. Pease, who was one of the major shareholders of the Calder—Hebble Canal.

Waterways were vital, but the other newcomer to transport, the turnpike road, made a much smaller contribution to trade. It was not normally practicable or desirable to carry raw marerials or manufactured goods on the winding, boggy tracks of the East Riding, and though the corporation spoke of the highway to the West Riding when they wanted to turnpike the road to Kirkella in 1744, it eventually terminated not at Selby on the Ouse, but at Newport on the new Market Weighton Canal! All attempts to turnpike the rest of the road, either to the Ouse or to the Don, failed because it was simply not practical to compete with water transport to and from Selby. The point is underlined by the arguments against the first turnpike road in the East Riding, from Hull to Beverley, that it was unnecessary because the river Hull was navigable to within reach of Beverley, and that the existing road was good enough for passengers; and by the action of the young Methodists of North Ferriby, who, having decided to build themselves a chapel, bought the timber in Hull, lashed it together, and sailed it down the Humber rather than trundle it along the road.

The roads may have been good enough for carts and passengers, but they were not good enough for the merchants who wished to take their ladies to the social life of Beverley, and the death of Alderman William Mowld in the forties when his chaise overturned on his way home ro his country house was no doubt a powerful stimulus to those desirous of building their own country seats in the villages around Hull. Consequently the turnpike roads were built round the town, but they were for local rather than long-distance traffie, and did not even carry the London mails, which came up through Lincolnshire and over the ferry from Barton.

(b) Docks

The traffic stimulated by the development of rivers and canals very quickly clogged up the port facilities that had served Hull since the Middle Ages. As early as 1756 a town meeting had agreed that 'by the increase of trade the present harbour for ships at the port is become not near large enough for the shipping and the want of

sufficient room therein is found to be very detrimental and hazardous'; and it was proposed that a dock should be built, Liverpool-fashion, by reclaiming land from the Humber foreshore. There was, however, to be one important difference. Whereas the Liverpool docks were commercial docks, the Hull dock was to be for 'light' ships only, a place for keeping empty ships out of the way of business in the old Haven, which was to remain the centre of gravity in the port. This decision, which came to nothing in the end, was the first blow in a conflict that was to last for half a century between the owners of private staiths in High Street who wished to preserve their site values and their semi-monopolistic position, and their less favourably placed rivals who wished to create a trading centre on a public quay elsewhere. So powerful were the merchants in High Street that it is likely that nothing would have been done, and the port left unprepared for the trade expansion of the eighties, had it

not been for the direct intervention of the Treasury.

The Treasury was concerned at the difficulties facing Customs officers in a port where the ship was the 'legal quay', with goods being carried over the side into lighters in midstream, or over intervening vessels to the staiths. 'We must believe', the Customs officers reported to headquarters, 'that the weight or gauge of every species of goods could be more certainly ascertained upon a legal quay'. The Commissioners of Customs agreed, and the Treasury refused to allow through Parliament a Bill prepared in 1767 which contained clauses expressly forbidding the movement in the dock of trade goods, which must be handled 'in the . . . haven . . . or at the staiths or warehouses adjoining thereto, in such manner as hath been used and accustomed before the passing of this Act'. Stalemate persisted for some years, until the Customs again made the pace by threatening, among other things, to move the custom house out of High Street altogether if the town would not build a legal quay contiguous to it, and the corporation, spurred on by petitions from a host of inland merchants complaining about conditions at Hull and praying for a port to be set up elsewhere, began to seriously reconsider the building of a dock in 1772. When their intention became known, the Customs immediately demanded that the proposed dock should contain the coveted legal quay, and the town again drew back. Finally, in 1773, the Treasury determined to be trifled with no longer, and threatened to make Gainsborough a port, and 'do such other things in the neighbourhood of Hull as for the trade of the country it appeared to them they ought to do'. They also offered valuable land for a site, and a subsidy of £15,000, and the town prudently gave in.

The dock constructed under the Act of 1774 was unique not only for its great size (at 15 acres it was the biggest completed in the 18th century) and for its inland site, but also for the last-minute decision of the corporation to hand it over to private speculation. The Hull Dock Company was the first application of the joint-srock principle to this kind of social overhead capital. It was eminently successful, a fact no doubt foreseen by those merchants who,

having opposed the doek to the bitter end, now rushed to buy shares in the Company. The Act authorised the raising of capital of £80,000 in £500 shares, but only £60,000 worth of shares was issued, and only a 50 per cent call was made on those. Of the £73,330 spent on the dock, £15,000 came from the Treasury subsidy and £26,080 from duties that were levied from the passing of the Act, not the opening of the dock. The shareholders enjoyed dividends amounting to £180,000 in the years 1780-1804; but as a public utility company they led the town close to disaster.

The first Hull dock, opened in 1778, was a great achievement, and should be recognised as such, but admiration for a single act of dock-building must not be allowed to deflect criticism from the Company's activity over time. No one would deny that the dock was perfectly adequate at first—in 1780 it accommodated 88,000 tons of shipping—but many contemporaries thought it patently inadequate when 107,000 tons entered the port when peace returned in 1783. It was planned just too soon to allow for the great surge of shipping in the 1780s. All would have been well if the Company had accepted an obligation to provide facilities appropriate to need, but it did not. It had a monopoly right to duties on every vessel entering the port, whether or not it entered the dock, and every incentive not to expand its facilities, which must necessarily involve it in capital expenditure which would not increase income. The Company steadfastly asserted that its income was a reward for building the first dock, and that in any case the trade boom would not last.

Despite all the efforts of 'expansionist' merchants (like William Osbourne, who headed the merchants' action group and had already built Kingston-upon-Spey and conspired in the rebirth of Grimsby), the Company could not be persuaded or forced to act, and two attempts to take it over and 'sink its shares for the public good' failed. Humber Dock, planned by John Rennie and opened in 1809, was in reality a compromise, whereby the corporation and Hull Trinity House were compelled to contribute half the cost, to their own financial hardship and the Company's great benefit. Of the £353,000 spent on the first two docks, the Dock Company had found only £136,000; the rest came out of public funds of one sort or another.

It would, however, be wrong to imply that the Company considered only its own financial well-being. Many leading members of the Company had the interests of the town at heart and sincerely believed that they had provided adequate facilities. What they lacked was foresight (facilities were not used in the expected way and, particularly, foreign-going ships ceased to use the old Haven). The Company consistently underestimated future needs, perhaps because they were gradually divorced from the dock-using community. Thus Humber Dock, like the first dock, was too small (at 7 acres) from the beginning, and did little to solve the problem of growing congestion as more and bigger ships struggled into the old Haven on their way to the first dock, until a local wit concentrated the anger of shipowners in the almost truthful assertion that it took

longer to get a ship into the old dock than it did to bring it from St. Petersburg. Hull's failure to keep pace with Liverpool's bounding growth is not simply a matter of cotton; we must also take into account the relative inferiority of Hull's facilities and the high level of her duties (payable to the Dock Company, to the corporation and to Trinity House). While Liverpool's publicly-owned docks enrered a period of forward planning in the early 19th century, Hull continued to pay dearly for her misguided faith in monopolistic private enterprise.

(c) Shipping

Another factor eventually emphasising Hull's relative inferiority was her failure to develop the kind of adventurous shipowning that was to play such a vital part in the ereation of Liverpool's world-wide influence by the middle of the 19th century. But this was beyond our period, and in any case it might be argued with some justice that the nature of the local shipping industry was determined by the nature of local trade, and not vice-versa. Whatever was to happen in the future, in the 18th century Hull was quite able ro provide the shipping required by her trade, at an unknown

but inevitably great capital outlay.

Records of ships registered at measured tonnage were nor kept before the first major Registration Act of 1786, but the Customs did rake note of every English vessel trading in the individual ports and compiled their own lists of 'ships belonging to . . .', which were based on masters' estimates of tonnage. These lists show Hull as having roughly 6-7,000 tons of shipping engaged in the foreign trade and 5-6,000 tons in the coastal trade, making a total of around 12,000 tons for most of the first half of the century. Apart from a brief rise in 1751-4, there was almost no change until the midsixties, when a steady rise began, taking the total of ships belonging to Hull to 23,275 tons by 1778, when war began to pull it down again. The ending of the American Revolutionary War was followed by a tremendous influx of ships employed in foreign trade, which rose from 56 and 8,530 tons at the lowest point, 1782, to 128 and 21,992 tons in 1785. The total ships belonging to the port rose from 233 and 21,099 tons to 344 and 37,751 tons in the same period.

Clearly this rise is associated with the rapid expansion of trade which we have already discussed, and it is worth considering where all these additional ships suddenly sprang from, for they represent more than the port's own shipbuilding eapacity, large rhough that was. Some were ships that were built locally, in Hull or Whitby, or reappeared after being laid up or used away from Hull. (Ships were counted where they were used, not where they were owned, as happened after 1788.) Others were 'prizes made free'—the ships which the British, having the superior navy and naval skills, captured from other maritime nations; literally thousands were taken from the Dutch in the late 17th century, and every new war saw a fresh increment of French, Spanish or Dutch ships to remove the

pressure on British builders as the demand for ships grew. But the more interesting—and the larger—ships arrived, no doubt as bargains, from the western ports that were fat more badly hit than Hull by the American troubles. With the collapse of the Glasgow tobacco trade and the temporary run-down of Liverpool's transatlantic trade, ships were transferted to Hull's less exotic bulky trades. Some ships arrived directly from America as soon as their owners realised that Independence would automatically exclude them from imperial trade. This was particularly true of whalers, 37 per cent of those added to the Hull register in 1784-7 being of American origin. (The 1786 Act was not aimed primarily at creating the modern shipping register for its own sake, but at providing a tool for the exclusion of United States ships from imperial trade.)

As a result of the 1786 Act, the number and accurate tonnage of ships owned in Hull becomes available for the first time. The fact that there were 392 ships in 1788 as opposed to 340 'belonging' in 1786 may, perhaps, indicate that there were already a fair number of ships belonging to Hull owners but not actually working in the port—Hammond and Staniforth ships probably fall in this category. Unfortunately the dramatic rise in tonnage, from 37,515 in 1786 to 52,101 in 1788, is no accurate guide to growth, since the pre- and post-1787 figures are not comparable. What is worthy of comment is the tapid rise in tonnage owned in the port after 1788: hy 1800 Hull had 611 vessels with an aggregate tonnage of 68,533, and this was very nearly the maximum before steam and iron transformed

the shipping industry in the 19th century.

Throughout the century, the ships trading in Hull were chiefly Hull ships. The Navigation Acts in the late 17th century had been aimed specifically at the Dutch carrying trade and had been largely successful. However, foreign ships could still carry goods to and from their own countries, and Norwegian ships, for instance, were very common in the wood trade, which was largely a one-way traffic (and sometimes operated like the coastal coal trade, with cargoes arriving on a master's account). The export trade to the Baltic, on the other hand, was carried overwhelmingly in British bottoms, and the vast majority of these, according to the Sound Toll Registers, were declared to be Hull ships. There were, of course, exceptional periods when war brought a decline in the number of active Hull ships, partly because they were offered or requisitioned as naval transports, their place being taken by ships of the trading partner, and partly because Hull ships were often sent abroad at the first sign of war and were 'coloured' with foreign papers to satisfy the European enemy.

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The Navigation Acts appear as likely encouragers of native shipping, but their value as such can easily be overstated. The most important reason for Hull ships dominating her Baltic trade was the simple fact that Hull merchants and Hull master mariners had opened up that trade for themselves. The ships were owned in Hull because that was where the merchants were. The chief competition—if that is a valid way of looking at shipowning when it was still an

ancillary of merchanting—eame from other English ports. It was still necessary, on occasions, to draw ships in to supplement or eomplement Hull's own fleet. For example, ships which the Maisters used in their corn trade were brought from London in the 1740s, and the good ship *Albion*, which sailed for Nova Scotia in 1774 with woollens, linen, ironmongery and 188 emigrants, was a Whitby ship. Ship masters were less pleased than merchants to see their rivals from other ports, and they occasionally grumbled and wished that shipping was not quite such a perfect market; and the Hull Chamber of Commerce had some harsh things to say in 1784 about Newcastle and Whitby ships which, it was alleged, undercut Hull freight rates by working an elaborate fraud on the Customs.

The ships to which men entrusted their fortunes and their lives at the beginning of the 18th century were, to modern eyes, incredibly small. The typical vessel was not the huge East Indiaman of the engravings (which itself was a mere thousand tons or so), but a much smaller vessel in which most of us would think twice before crossing the Humber on a squally day. The average English ship clearing from Hull for foreign parts in 1710-17 was roughly 74 rons, compared with the 111 tons average for foreign-owned vessels in the same period. The average was even lower in 1737, and was still only 100 tons for English and foreign ships together in 1758. In the 1760s, however, the English average began to grow, and ships arriving in Hull in 1770 averaged 153 tons. The rising trend was chiefly the result of Hull's increasing interest in the eastern Baltic, which employed relatively large ships, as we saw above. So heavily was Hull's trade concentrated in rhis area that the average tonnage entering Hull in 1790 was larger—at 198 tons—than for any other port in the country, including London, which came second with an average of 164 tons. Hull did not, however, own many very large ships. Indeed, her largest ship was only 505 tons in 1790 and 573 tons in 1800. By far the largest number of ships-96 in 1790 and 228 in 1800—fell in the 40-60 tons range. No fewer than 212 out of 409 vessels were under 100 tons in 1790, 350 out of 611 in 1800, which is what we should expect in a port so heavily engaged in the coastal trade, which employed smaller vessels than the foreign trade.

An increase in the number and size of ships required a more sophisticated organisation of the shipping industry. It became necessary for a specialist to act as an intermediary between merchants and masters to secure the fastest possible turn-round of the more expensive ships, and the cheapest possible freights for merchants who were increasingly conscious of competition with Liverpool to secure the trade of the hinterland. It was common in the earlier part of the century for merchants to employ their own ships (or, rather, ships in which they owned shares), but never to completely fill them with their own goods. Shared cargoes were always the rule rather than the exception, and shared cargoes meant either a group of merchants working together, or the leading merchant, owner or master looking for likely merchants to help fill up a ship. Only rarely did merchants charter ships for the export trade (though

it was more commonly done in the import trade because of the bulky cargoes involved), and even the greatest of merchants often required only a few cubic feet of ship space. By the middle of the century, with the increasing number of ships and trade routes, and wirh more merchants seeking shipping space, some of the more experienced shippers began to sell their services as brokers (as the Maisters, for instance, had always done, unofficially). Though the first and leading brokers—firms such as Terry & Wright, Hall & Robinson and Wray & Hollingsworth—were also important merchant houses, there emerged in the third quarter of the century the specialist brokers, most of whom came from the sea rather than from the counting house. Of ten brokers listed in Battle's Hull Directory for 1790-1, at least five had originally been master mariners; perhaps they lacked the capital with which other men set themselves up as merchants or shipowners.

Closely associated with the development of broking was the emergence of the 'packet' and 'constant sailer' in the third quarter of the century, both in the coastal and foreign trades. It was the broker and the packet together which, more than anything else, allowed the industrialist exporter to break free from the merchant. An industrialist having direct contact with his customer abroad could now bypass the Hull merchant completely, using instead the services of the broker, and planning the movement of goods to Hull to correspond with the known sailing times of 'ships laid on'. Both the broker and the packet owed a great deal to the new commercial press, without which their services could not have been widely disseminated. The Hull Packet or Advertiser and Exchange Gazette regularly carried advertisements by brokers seeking to dispose of or obtain shipping space, while inland newspapers such as the Leeds Intelligencer and Aris's Birmingham Gazette had for a decade or more advertised 'ships laid on', invariably accompanied by that jolly engraving of a ship three or four times the size of the vessel in question.

As the merchant—especially the export merchant—became relatively less important, the shipowner and his agent became relarively more important in commercial life. There were no shipowners, in the modern sense, in the first half of the century, only owners of shares in ships. Occasionally somebody like Joseph Pease might own the whole of a 300-tonner, but it was not necessary to do so, and sole owners usually had only the smallest of vessels. It was safer to spread risks by owning shares in a number of vessels, and the owning of these shares was an accepted part of merchanting. The great value of the system was thar, as the need arose, capital could be drawn into shipping from the widest possible market, with shares so small that risk seemed minimal and profit assured. A share in a ship was one of the safesr of 18th-century 'risk' investments, and owners included master mariners, merchants, victuallers, shipbuilders, bankers and clerks, in fact tradespeople of every sort, and the inevitable widows and spinsters. Many owners lived outside Hull: a mariner in Howsham, a housewife in Grimsby, a corn-factor in Brigg, a wharfinger in Bawtry, a brewer in Burton. The list is endless. How much capital they collectively subscribed—and how much profit they earned—is unknown, but it seems unlikely that the amount drawn into shipping between 1783 and the end of the

century was much less than a quarter-of-a-million pounds.

The ship was controlled by the managing owner who sold the shares in the first place, or by the master. (Communications were so good in northern Europe that supercargoes were very rare.) At first the managing owners were merchants, or retired masters, and had no thought of calling themselves shipowners, but as the demand for ships increased and as the operation of ships appeared to work better when completely separated from merchanting, men put more of their capital into ships and regarded themselves as shipowners. John Staniforth, probably the greatest of all Hull shipowners in our period, was one of the first men to use the term in Hull. It is noticeable that shipowning as a separate profession first appeared in Hull in connexion with the whaling fleet, which had no particular connexion (after the first phase in the fifties) wirh established trades and which consisted of ships purchased specifically for this trade and for which they were expensively adapted. Similarly, the Wardens of Trinity House were until about 1770 men who can be identified as practising master mariners, whereas after that date they were increasingly—and eventually entirely—men who were first masters and then owners in the Greenland trade. Many of the leading shipowners at the end of the century-men such as Robert Gec, John Staniforth and Daniel Tong—were to be found as master in the Arctic, and of the 45 'shipowners' listed in Battle's directory for 1790-1 at least 29 can be proved to have been master mariners (though not all in the Greenland trade). This docs not mean that merchants no longer owned shares, or that owners were not to be found among the rown's non-mcrcantile middle class, but it does mean that the organisation of the industry passed into the hands of specialists, who hedged their risks with the newly emerging marine insurance, and thus secured, indirectly, the backing of the richer merchants who still predominated among the underwriters.

The shipowner came into his own around the turn of the century. The profits of shipowning were ploughed back into shipping as men made conscious decisions about investment and put their fortunes into ships rather than into trade or land. With insurance to back them they were prepared to take a much larger share of individual ships, and became far more important than ever the small-scale 'managing owners' had been in the past. Families such as the Schonswars, Staniforths and Hammonds, who had been owning ships as their chief occupation since perhaps 1765-70, were to be found among the most affluent and influential in the town. The Staniforths and Schonswars both gave the town one of its Members of Parliament in the early 19th century, and the Hammonds, with a long history of political influence in Hull, provided

the first ambassador to the United States of America.

CONCLUSION

The beginning of the relative decline of the merchant—though we must not exaggerate his decline during our period—was symptomatic of the changes taking place in the town as a whole. We began our story at the point where Hull had broken free from inland merchants—chiefly those of York—and was organising and drawing profits from her own trade. For a century or more the Hull merchant was the prime mover in trade, but now we end our period with the hinterland once more assuming a greater authority in rhe direction of trade, aided by the emergence in Hull of brokers and wharfingers who were concerned with the mechanics of moving goods. The 'connexions' in the export trade were increasingly—though not entirely—made by rhe manufacturer himself, and ir would nor be long before he could also obtain far more of his raw materials at home—or from Liverpool, as English iron and American cotton displaced Scandinavian and Baltic iron and linen yarn.

Hull's trade grew very substantially in the 18th century, as the town responded to the bursts of economic activity during the years of peace: in the 1730s, between 1748 and 1756, between 1763 and 1774/5, and again in the largest of all rrade explosions, after 1783. But Hull remained a north European and Baltic port, with a eonsequent limitation on her potential expansion. Hull changed, and grew, bur she never enjoyed rhe massive trade and great wealth that came ro Liverpool, which was so much more favourably placed for transatlantic trade, or London, which enjoyed a legal monopoly

in far eastern trade.

From the standpoint of Hull's merchants at the end of the century, the future appeared somewhat clouded, especially since the port now faced competition from Grimsby and was soon to be presented with the far more determined opposition of Goole. While the fears of her merehants eventually proved ill-founded, there were many worried men in Hull in the early decades of the 19th eentury. Nevertheless, we must emphasise the port's recent achievements rather than mereantile gossip. Raw materials had been secured and manufactures disposed of in an efficient and speedy manner. Capital had been invested in shipping and port facilities, and a financial system created both for international exchange and for local operations. A group of brokers and underwriters had emerged to facilitate or project trade. An important new trade with the Arctic had been created to serve the rising market for oil, while rhe huge coastal trade balanced the rather limited nature of the foreign trade. Perhaps Hull merchants and shipowners could have been more adventurous and enterprising in pushing into or developing the more lucrative new trades, but in fact they were enterprising in opening up the trades in which they specialised. A larger or richer mercantile group might have done more, but the faet remains that ports require other advantages, besides adequate entrepreneurs, and those advantages, in competitive terms, swung a large amount of the most lucrative trade to Liverpool and London. No matter how effective her merchants and shipowners, there was little chance that Hull, flourishing though she was, could ever catch up with her two chief rivals. It was this knowledge, rather than any actual decline in trade, that impressed—and depressed—local men at the end of the

century, and encouraged the local prophets of doom.

If the trading future did not appear as bright as it should have done after a century of bounding progress, the industrial future appeared promising. A variety of industries had been quietly blossoming in Hull, based upon her trade, and by 1815 they were bearing sufficient fruit for Hull to deserve more attention as an industrial centre than she usually gets. Her shipbuilding had always been important, and ranked third or fourth in the country in the nineties; her extractive and processing industries were of national importance, particularly in oil and sugar refining, and in soap, paper and paint making; her millwrights and founders were beginning to work on processing machinery and even on steam engines. The first steam-powered flour mill was opened very shortly after the famous Albion Mill, and by the end of the century over a third of all the Boulton and Watt rotative engines in Yorkshire were blackening the sky over Hull. The industrialist was catching up with the merchant and the shipowner as a worthy and wealthy citizen, though it must be admitted that many of the leading industrialists were also merchants who had invested in processing industry—men such as the Peases, Thompsons, Maisters, Thorntons and Wilberforces.

Industry and trade required labour, and perhaps the most obvious change to people living in Hull was the increasing population as people were drawn in from Yorkshire and Lincolnshire villages, and from every decayed 'port' along the east coast or up the rivers. The population doubled in the second half of the century and by 1801 had reached 22,161. The town changed physically to accommodate these newcomers. There was overcrowding in the old town as house building failed to keep pace with the population growth. New streets were cut through medieval property, and gardens and courts were built over; part of the Humber bank was reclaimed for new streets; and estates were developed to the north of the first dock for the richer inhabitants who began to leave their houses in the old town and allowed them to become tenements or workshops. At last the town had broken the restraining bands of the ancient walls. They were loosed first to allow industry to spread along the banks of the Hull to the north of the town in the fifties; then, in the eighties, came the new streets beyond the dock, and finally, following the building of rhe second dock on the west of the old town, a general movement northwards and westwards which almost doubled the area of the town in a quarter of a century. Although the market remained where it had always been, the 'centre' of the town moved outside the walls, just beyond Beverley Gate, where it has remained to this day. The move was symbolic. Hull in 1700 had been close to her past, both as a port and a town; by 1815 she was recognisably modern. The great transitional period was over.

SOURCES

AND SELECT BIBLIOGRAPHY

This account is based on original material in national and local archives. The starting point for any serious study of local trade must be the Customs records. The Port Books, containing a complete list of goods, merchants and ships in the foreign trade, and of goods and ships in the coastal trade, are in the Public Record Office, ref. E 190/337-86. (The best preserved books were microfilmed and may be consulted in Hull Local History Library.) The Customs Letter Books are preserved in King's Beam House, and the compilations of statistics are in the CUSTOMS series which is split between the Public Record Office and King's Beam House, Much incidental information came from the mass of papers relating to the 18th century in the corporation archives in Hull Guildhall, and from the papers of the Dock Company which are now in the British Transport Historical Records, London. The chief sources of financial history are the Pease papers at Wilberforce House, and the records of the Pease bank and Smith & Thompson's, which are preserved in Barclay's Bank and the National Westminster Bank in Hull. Finally, merchant activity can be followed in the few surviving papers of Maisters (in the University of Hull Library, at Wilberforce House, and in private hands), Broadleys (at Wilberforce House and in the Humberside County Record Office), Peases (at Wilberforce House) and Wray & Hollingsworth (in Hull Local History Library).

Detailed reference to those and other manuscripts, together with a full account of the economic and social life of Hull in this period, is to be found in my Eighteenth Century Hull (Oxford University Press, University of Hull Publications, 1971). A comphrensive survey of the town also appears in the Victoria County History, Yorkshire East Riding, Volume 1 (1969).

Three histories of Hull were published in the 18th century:

- T. GENT, Annales Regioduni Hullini, or, The History of the Royal and Beautiful Town of Kingston-upon-Hull (1735).
- G. HADLEY, New and Complete History of Kingsion-upon-Hull (1788).
- J. TICKELL, History of the Town and County of Kingstonupon-Hull (1796).

Unfortunately none of them pays much attention to the economy of the town, the last two being, more or less, extracts from the corporation bench books. Nor is much reliance to be placed on the well-known 19th-century work, J. J. Sheahan, *History of the Town and Port of Kingston-upon-Hull* (1864), which has a great deal of interesting, though muddled, information.

More valuable for our purposes are a number of contemporary works:

- C. CAINE (ed.), Strother's Journal (1912) contains the gossip of the town as recorded by a young mercantile apprentice in 1784.
- J. SANDERSON, Voyage from Hull to Greenland in the year 1789 (1789) gives a vivid picture of life on board a whaler.
- Anon., Origin and Adventures of a Hull Eighteen-Penny Token (1811) contains a description of the town in the early 19th century which may be authentic.
- J. GEE, The Trade and Navigation of Great Britain Considered (1731) is a valuable account of general British trade in the early years of the century.
- J. J. Oddy, European Commerce (1805) serves the same purpose for the end of the century.

A list of ships passing through the Sound is contained in N. Bang and K. Korst, *Tabbeller over Skibsfart og Varetransport Gennem Øresund*, 1661-1783 (2 vols., Copenhagen, 1930 and 1953), while valuable information on Hull's position in relation to her hinterland can be found in:

- I. S. BECKWITH, 'The River Trade of Gainsborough, 1500-1850', Lincolnshire History and Archaeology, No. 2 (1967).
- J. D. CHAMBERS, The Vale of Trent, 1670-1800 (Econ. Hist. Soc., Supplement No. 3) (196-).
- B. F. Duckham, The Yorkshire Ouse (1967).
- B. F. DUCKHAM, The Inland Waterways of East Yorkshire, 1700-1900 (East Yorkshire Local History Series, No. 29) (1973).
- G. JACKSON, Grimsby and the Haven Company, 1796-1846 (1970).
- K. A. MACMAHON, Roads and Turnpike Trusts in Eastern Yorkshire (East Yorkshire Local History Series, No. 18) (1964).
- R. W. UNWIN, 'Trade and Transport in the Humber, Ouse and Trent Basins, 1660-1770' (Hull University Ph.D. thesis, 1971).
- T. S. WILLAN, The Early History of the Don Navigation (1965).
- T. S. WILLAN, The English Coasting Trade, 1600-1750 (1938).
- T. S. WILLAN, River Navigation in England, 1600-1750 (1936).

For an account of English trade as a whole, the standard work is R. Davis, 'English Foreign Trade, 1700-1774', Econ. Hist. Rev., 2nd Series, Volume xv, No. 1 (1962), and for the history of other ports, the best work is J. Bird, The Major Seaports of the United Kingdom (1953).

Relevant foreign trades are discussed in H. S. K. Kent, War and Trade in Northern Seas (1973), H. E. S. Fisher, The Portugal Trade (1971), and my forthcoming History of the British Whaling Trade.

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