History of the Port of Bristol.
LEADING EVENTS
IN THE
HISTORY
OF THE
PORT OF BRISTOL

By W. N. Reid and W. E. Hicks.

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CONTENTS.

Early Commerce ... ... ... ... ... ... ... ... 1
Origin of Trade on the Avon ... ... ... ... ... ... ... ... 4
The Old Port of Bristol ... ... ... ... ... ... ... ... ... ... 9
Early Bristol Trade ... ... ... ... ... ... ... ... ... ... 11
Cutting St. Augustine's Trench ... ... ... ... ... ... ... ... 14
The Building of the Bridges ... ... ... ... ... ... ... ... ... 16
Eighty Years of Misfortune ... ... ... ... ... ... ... ... ... 19
A Hundred Years of Progress ... ... ... ... ... ... ... ... ... 20
Canynge, the Merchant Prince ... ... ... ... ... ... ... ... ... 22
The Age of Merchant Princes ... ... ... ... ... ... ... ... ... 26
The Cabots and their Employers ... ... ... ... ... ... ... ... ... 28
The Merchant Venturers ... ... ... ... ... ... ... ... ... ... 39
Bristol and the Spanish Armada ... ... ... ... ... ... ... ... ... 40
Maritime Expeditions from Bristol ... ... ... ... ... ... ... ... ... 42
Bristol and the Navy ... ... ... ... ... ... ... ... ... ... ... ... ... ... 53
Edward Colston ... ... ... ... ... ... ... ... ... ... ... ... ... ... 56
A Few Unconnected Links ... ... ... ... ... ... ... ... ... ... ... 58
The Port a Hundred Years Ago ... ... ... ... ... ... ... ... ... 64
The New Cut and Floating Harbour ... ... ... ... ... ... ... ... ... 68
Bristol and the First Atlantic Steamer ... ... ... ... ... ... ... 71
Great Western and Great Britain Steamships ... ... ... ... ... ... 74
Free Port Movement ... ... ... ... ... ... ... ... ... ... ... ... ... ... 78
Various Plans for the Improvement of the Port ... ... ... ... ... ... 86
Tides in the Bristol Channel ... ... ... ... ... ... ... ... ... ... ... 102
Comparative Returns of the Trade of the Port ... ... ... ... ... ... ... 104
Avonmouth Dock and the Floating Harbour ... ... ... ... ... ... ... 111
The Opening of Avonmouth Dock ... ... ... ... ... ... ... ... ... ... 114
List of Passengers on board the Juno ... ... ... ... ... ... ... ... ... 115
The Legend of the Avon ... ... ... ... ... ... ... ... ... ... ... ... ... ... 121
Leading Events in the History of the Port of Bristol.

The years 1247 and 1809 are memorable dates in the annals of the port of Bristol, and to these 1877 will henceforth be added. The digging of the Trench, the making of the New Cut, and the formation of the Docks at the river's mouth—each represents a stirring period of enterprise and progress. Two of these have proved to be the starting points of increasing development—the third is the fait accompli of to-day. From the first and second have issued the growth and energy which have produced the third, and the latest step forward opens up still greater possibilities for Bristol commerce. It is well, at such a time, to mark the leading events in the history of the port, the share Bristol shipping has taken in the affairs of the country during past centuries, the rise of her merchants into positions of affluence and national repute. By noting what is past we may estimate the value of the work
by which the port is for the first time open to ocean-going traffic of the most modern kind. A chronicler in the time of King Stephen said of Bristol that it was "the most famous place of commerce in England next to London," and while later historians have not failed to claim for the port a first-class position, there are some matters in connection with which our local credit has scarcely been established with sufficient clearness. The first merchant mentioned in Bristol history was of Royal blood—Harding, filius regis Dacie. Bristol stood next to London in naval contribution at the siege of Calais by Edward III.; the "services in times past of their shipping" won for the city the honour of being constituted a county in itself. Bristol has at critical periods aided Royalty with her ships again and again. At the time of the battle of Agincourt she not only sent the king eight large ships, but ballasted them with Spanish wines. As Michael Drayton musically tells us:—

Eight goodly ships, so Bristow ready made,
Which to the king they bountifully lent,
With Spanish wines, which they for ballast lade,
In happy speed of his brave voyagement:
Hoping his conquest should enlarge their trade:
And therewithal a rich and spacious tent.
And as the fleet the Severne seas doth stem,
Five more from Padstow came along with them.

It was when twelve ships sailed from Bristol to assist at the siege of Bulloigne, among them the Thorne, the Pratt, and the Gourney, that bluff King Hal wished he had "more such Thornes and Pratts and Gourneys in his land." Four centuries ago Bristol merchants were spoken of as "merchant princes," and in the time of the Canynges the Commons could find no richer place for ships to send on its expeditions, or for
money to maintain them. Bristol tars struggled hard for hearth and home against Armada terrors, and the capture of 32 ships and 10,000 men proves that the old city was not sparing in her preparations. A Bristol Mayor shared in the fight at Cales action. The building of the largest ships of war was common in Bristol two centuries ago. The first vessel direct from the East Indies to England was a Bristol ship. The North-West Passage again and again occupied the attention of Bristol adventurers in costly expeditions. Bristolians were seeking for the unknown lands before the great discovery of Columbus, as the Spanish ambassador showed when in 1498 he wrote home to Ferdinand and Isabella—"For the last seven years the people of Bristowe have sent out every year two, three, or four light ships in search of the island of Brazil and the Seven Cities." This view is also maintained by Mr. Fox Bourne, in the following striking passage from his "Story of our Colonies":—"It was a Bristol crew on board a Bristol ship that first set eyes on the mainland of America." And Bristol not only found the land, but built the first steamer to solve the question of making ocean steam traffic a commercial success. On both these points history, according to the latest and most authentic chronicles, is clear in its assertion that Bristol wealth and spirit of adventure shared the glories of the solution of the Western mystery, and fitted and despatched across the Atlantic the first steam vessel that proved the absurdity of Dr. Lardner's theories. In the face of special obstacles, with a tortuous river exceptionally difficult of navigation, our merchants have upheld the name of Bristol as a port ranking high among the first-class centres of shipping and commerce, and no more gratifying fact can be placed on record
than that in this year 1877, after a prolonged period of depressed trade, the business of the port is more flourishingly progressive than it has ever been. Besides the striking testimony of the dock which is about to be opened, improvements which at one time would have marked an era are at the present moment advancing, pari passu, in the port and harbour of Bristol. A résumé of the more striking events associated with the history of the port may not, therefore, be altogether without interest. In any pursuit, the contemplation of the work of the ablest and noblest kindles afresh the fire of emulation, and the truest judgment is strengthened by considering the best words and deeds of predecessors. It is with this object that the endeavour has been made to bring together some of the more salient points in the history of the shipping and port of Bristol.

**THE ORIGIN OF TRADE IN THE AVON.**

An accurate history of the trade of the Avon would, no doubt, take us back far into the regions of tradition; but it is not with the very remote and the uncertain that we propose to deal. The convenience of the estuary we now call the Severn, and the River Avon, for purposes of trade must have pointed out the district to the earliest British population as worthy of their attention, and we know that during the occupation of this island by the Romans they had important stations close to the site of Bristol. It has been maintained, indeed, that the general plan of the city, the main streets of which have always been, and are now, in the form of a cross—
shows a Christian origin by reason of the position of the four churches, which were formerly at the corners where the four streets join in the centre, and hence that the city, on its present lines—whatever may have been its previous history, had a Roman-British origin—a Saxon origin being out of the question. Tradition had ascribed the foundation of the city to a period much earlier than this, and just as the foundation of Rome is associated with the brothers Romulus and Remus, the foundation of Bristol is by tradition associated with the names of the brothers Brennus (Bran) and Belinus (Beli). The name of one of these British princes has been preserved
in "Brandon" Hill, and the effigies of both still grace the Broad Street front of St. John's Church. This tradition takes us back more than 200 years before the Christian era. There is a still older tradition which ascribes the foundation of Caer-Odor (Clifton) to Dyfnwal Moelmyd, Earl of Cornwall. These traditions or facts, however, must be left to the archæologists, and if the Bristol and Gloucestershire Archæological Society wants a subject to exercise its functions upon, it cannot do better than attempt to trace the history of the Avon in relation to the port and trade of the city. There is absolutely no exhaustive work on the subject, but there are a multitude of scattered facts, the best authenticated of which we propose to bring together.

If we could cancel sixteen or seventeen centuries and look upon the Avon and the positions on its banks where the native population and their military masters, the Romans, chiefly congregated, we should find a large community at Sea Mills, where was the Roman Station Abona; and British, or Roman and British, people occupying the heights on Clifton Down and the hills opposite, where their defensive works still remain. The coins and defensive works found on these sites leave no doubt as to their history. Further up the Severn than Sea Mills, at Clifton, was the Caer-Odor of the British, and further up still Trajectus (probably Bristol) and Aquæ Solis (Bath), both of which were stations of the Romans. Of the trade of the Avon at that time there is no record. And the part that Bristol played in history during the first ten centuries of the Christian era is almost entirely unknown. That it was an important place in the Saxon period is shown by the fact that it had at a very early period a sort of local government, its chief magistrate being called Præpositus.
When the Domesday survey was made, the city paid a rent to the King, as Seyer estimates, of £85 per annum. ‘Bristol’ did not begin to take its place, indeed, as a historical term, till the eleventh century, and then the orthography of the word had not become fixed, being sometimes Bric-stow, and at others Bryg-stowe, Bristoe, Bright-stowe, &c. Still, it must have been an important centre of population long before this, as there are extant four or five pennies of the Danish King Cnut (Canute), which were coined at Bristol. About the year 1200 it was evidently believed that Bristol was a very old place, as the following lines, ascribed to Robert, the rhyming monk, testify:—

The first lords and masters that in this land were,  
And the chief towns first they let arear,  
London and Everwyk, Lyncolne, and Leycestre,  
Colchestre, Canterbye, Brystoe and Worcestre.

And Bristol must be regarded as a port of respectable antiquity by the writer of “Gesta Stephani,” in 1141, when he says: “Forming a port fit and safe for a thousand vessels, it binds the circuit of the city so nearly and so closely, that the whole city seemed to swim on the water and wholly to be set on the river banks.” And ten years before this (1131) there must have been the same impression, as a MS. of the time goes the length of describing Bristol as “Bristollium portus publicus et municipium famosum pro receptione hominum in multitudine copiosâ de diversis mundi partibus illuc undique confluentium.”

The Severn, the Avon, and the site of Bristol, offered such obvious advantages to invaders and defenders alike, that they must from the earliest times have received the attention of
those who had armed forces under their control, and it is known that Danish and Irish pirates and rovers of various nationalities followed the Romans in their appreciation of the district for warlike purposes, and for purposes of shelter, or plunder. It is a question how much truth there is in the statement that in 519 Bristol had so far increased in size and importance that it became the principal seaport, mart, fortress and capital of Wessex, and formed the frontier town towards Gloucestershire, but the fact has been put forward with some degree of confidence.

All this seems to imply at Bristol the existence of a community, and where there was a community on a navigable river there must have been trade, and to conduct this trade required appliances, vessels, and a place or quay to discharge. The population in those old times was thin, there being now nearly as many people in London as there were in all England so late as the reign of Edward III. In Bristol, according to the estimate made by Seyer, there were about 3,500 persons within the walls in the time of William the Conqueror.

The importance of the city in the 10th century is shown by the building of the second city wall. That there was a wall as early as 920 appears from some chronicles, Evans attributing the first wall to the time of King Arthur in the sixth century. The escape in a "Bristowe" ship in 1051 of Harold and Leofwyne (in league against the King) is the first association in history of the shipping of the city with royalty, and its capacities as a port are more fully disclosed by the sailing in 1063 of Harold against Griffin in Wales with "a body of men on board his fleet." It was six years after this that the townsmen defended themselves so vigorously against the three sons of Harold, who invaded them by water, that they compelled the invaders to retreat to their ships.
In 1087, Bristol was a veritable stronghold, Godfrey, Bishop of Exeter, being constable of the Castle. From these facts it would appear that the trade was considerably developed, and that it rapidly increased we know from the very important position which the city assumed between the twelfth and sixteenth centuries.

When we come within what may be called the local historic period the evidence of the extent of the trade of Bristol is conclusive, but as the written references to this trade have either been lost or are not at the present time available, the local historian has to depend upon circumstantial rather than direct evidence to show that Bristol was an important place before history takes any very special notice of the fact. In this respect Bristol suffers in common with every other ancient port in the country. There were in those days no printing offices, no newspapers, and such "chronicles" as were kept in manuscript were of a meagre kind. The people were uneducated and it was not till trade had made great progress that local history began to receive attention. But scant as are the materials for a complete history of the trade of the port of Bristol, especially in the early times, the leading events are clear, and it is to these only that we propose to refer.

THE OLD PORT OF BRISTOL.

How many Bristolians have ever thought much about the Old Port of Bristol? Where was the "key"? Where did ships discharge their cargoes before Bristol Bridge was built—the charter for which was granted in 1247? What was the aspect of the water ways of Brygstow, the city of bridges, before that year? We pass over the trade of the British and
Roman periods. There was trade at Abona and Trajectus no doubt. It was a necessity. But the trade which made Bristol the rival of London, and which caused one ancient writer to say that "York and Bristowe" were the only considerable cities in England besides London—the trade which lifted Bristol up and left her without an equal, the metropolis excepted, was of much later date.

To obtain a clear idea of the shipping facilities of Bristol before the bridge was built which united Redcliff with the city, it is necessary to remember that there was no water-way at all where the Drawbridge now is. From above that point to Prince Street was a marsh; and there was no Quay at the end of what we now call Clare Street. The Froom river, after passing through the city as far as the bridge in Christmas Street, turned off past the end of Small Street, where was St. Giles' bridge, and passing through Baldwin Street—turning a mill on its way—emptied itself into the Avon nearly opposite St. Nicholas Steps. The city, with its walls and castle, was within the protecting arm of the Froom, and communicated with Redcliff at the point where Bristol Bridge now stands by means of a ferry. The shipping was then accommodated near the ferry landing. "They passed by boat," a calendar says, "from St. Thomas slip to St. Mary-le-Port to come to Bristol, and at that time the port was where now St. Nicholas Shambles are, and there the shipping did ride." The vessels rose and fell with every tide, and discharged cargoes into cellars over which Bridge Street is now built,—cellars which from their groined roofs have been taken for something ecclesiastical. Such was the original "key" of the port of Bristol, and these proven facts are rather antagonistic to the theory propounded by Bishop
Clifford, that the bridge was built before the town by Severus,—unless the bridge had been swept away before the Norman era, or that the hypothetical old bridge was built further up the river. The surmise of Dr. Clifford, although ingenious, appears to have neither traditional nor documentary evidence to rest upon.

Bearing in mind the position of the port in the ages referred to, the force of the following suggestion made to King Stephen when he besieged the city, will be seen. It was proposed that he should "throw into the river a vast heap of large stones, wood, and turf, at the place where the mouth of the port of the city is contracted by a narrow pass, so that the entrance of the port being blocked up, the aid which the citizens received from the river by the labour of rowers, on which they principally depended, might be intercepted; and moreover, that the rivers which flowed around the city by having their reflux intercepted might arise from themselves; and being collected into a wide and deep lake, like a sea, might threaten the city with immediate submersion." Fortunately this benevolent design was not accomplished, or else the story of the city of Bristol, like that of the wise men of Gotham who went to sea in a tub, must have suffered from lack of material.

**EARLY BRISTOL TRADE.**

It may not in these days be deemed complimentary to the old city that some of the first authentic details of the trade of the port refer to an extensive traffic in slaves. There is said to be evidence to show that Harding, the Mayor and Governor of Bristol, who was a merchant on the bank of the
the Froom, dealt in this kind of merchandise along with others. Mr. Seyer declares that Harding was a lawyer, and for the sake of the old worthy's reputation let us hope that he was not guilty. However, to about his time is assigned the following passage on the life of Wulfstan, Bishop of Worcester:

"There is a seaport town, called Bristol, opposite to Ireland, into which its inhabitants make frequent voyages on account of trade. Wulfstan cured the people of this town of a most odious and inveterate custom, which they derived of their ancestors, of buying men and women in all parts of England, and exporting them to Ireland for the sake of gain. You might have seen with sorrow, long ranks of young persons of both sexes, and of the greatest beauty, tied together with ropes, and daily exposed to sale. Oh! horrid wickedness! to give up their nearest relations, nay, their own children, to slavery. Wulfstan, knowing the obstinacy of these people, sometimes stayed two months among them, preaching every Lord's day, by which, in process of time, he made so great an impression on their minds, that they abandoned that wicked trade, and set an example to all the rest of England to do the same."

It would appear from this that the "rest of England" continued the slave trade after Bristol had given it up.

Presumably there was no shipping intelligence published in those days, of the amount and nature of imports and exports, and such old chroniclers as referred to the trade were very vague in doing so, although profuse in expressions of astonishment at the size and wealth of the town. However, in 1140, the year before the imprisonment of King Stephen in Bristol Castle, we find the following description given of the trade of the city:—"In the same valley is a very celebrated town (vicus) by name Bristow, in which is a port, a resort of ships coming from Ireland, Norway, and other countries beyond sea, lest a region so fortunate in native riches should be destitute of the commerce of foreign wealth."
The writer of "Gesta Stephani," already mentioned, speaks of the port being fit and safe for a thousand vessels, but does not say that the thousand vessels were there. The information is, however, supplied by no less an authority than William of Malmesbury, who, writing of the time of the famous charters granted by the King and Robert Fitzhardinge to the men of Bristol, says that Bristol was now full of ships from Ireland, Norway, and every part of Europe, which brought hither great commerce and much foreign wealth.

Probably no generations ever did more, proportionately, to advance the trade of the old city than those living in the latter part of the 12th and the commencement of the 13th centuries, after which we get more definite information of our commerce. The time of which we speak was of a kind that it throws almost the glamour of romance over the picture of Bristol life. It was the time when the chivalry of Europe was bent Eastward on its sacred mission to the Holy Land; when Richard Cœur de Lion reigned, and when Robin Hood and his merry men hunted the deer in Sherwood Forest; the time of the Ivanhoe of Sir Walter Scott; and looking back to that most romantic period in English history, after the influx of the Normans, there is abundant proof of life, enterprise, and activity in the old Bristol whose boundaries have been already described. By the charter of 1185 we find the citizens dealing in leather, corn, wine and wool, and being guaranteed the monopoly of trade in them within the walls of the town; encouraged to possess all void places and to build thereon; exempt from toll, passage, and custom, and amongst other things, having anticipated modern legislators in a kind of Permissive Bill, which prevented any person from taking an inn or lodging-house without leave of the burgesses. The
commencement of the 13th century found the opulent and powerful persecuting with fiendish intensity, the Jews who lived near the Broad Weir, and no doubt regarding it as a proof of being fervent in spirit as well as diligent in business; found them choosing their first mayor under a special charter; found them also busy with plans for improving the port, and doubtless having many a field-day of discussion on the Dock question, like their descendants; found their traffic increasing, soap notably being added to the items of local trade, and all this additional traffic forcing upon the minds of the merchants the inconvenience of the awkward bed and rapid flow of the river. Ideas must have time to grow, and as the locking in of the water did not suggest itself to the minds of that day, an arm of the river, unaffected by the current, was projected.

The city was confined on the western side by the Froom, although there was much valuable land beyond; and to accommodate the growth of the city, and to provide more central quay space, the authorities resolved upon an undertaking which may be described as the first great engineering work connected with the port.

CUTTING ST. AUGUSTINE’S TRENCH.

The work to which the merchants applied themselves in 1239-40 was the digging, through a meadow and marsh, of a channel 2,400 feet long, 120 feet wide, and 18 feet deep. Even in days when our railways are made at six miles per day, and tunnels are bored through solid rock—as at Mont Cenis—at the rate of eleven feet daily, this would be no small undertaking; and the imperfection of the available methods, and the insecurity of property in those earlier times, must have
made the work appear one of special magnitude, as it was unquestionably one of great difficulty and unusual enterprise.

However weak King Henry's rule may in some respects have been, his enactments with regard to commerce were of so salutary a character that there scarcely existed at that time a port from the coast of Norway to the shores of Italy that was not annually visited by English merchants, and in Bristol a share of this success led to a policy of port extension. The Corporation, therefore, bought from the abbey of St. Augustine the field called Chanter's Close, extending from the river From to the hill on which St. Augustine's Church is built; and Seyer quotes the terms of the "Conventio facta inter dominum Willelmum de Bradestone et Ricardum Ailard (Mayor)."

Only the eastern or city side was practically available for a quay, but the merchants congratulated themselves that it would provide what Leland calls a "softe and wholy harborow for grate ships." Accordingly, in 1239-40, the work was begun by the opening of the ground below St. Augustine's Parish Church. For eight years the work of excavation went on. The only event while the work was in progress was the summons to the Redcliff merchants by the King to take their share of the expense; and the Royal recognition of the importance of the Trench is revealed in his words to the "honest men dwelling in la Redclive:"

"Since our beloved burgesses, for the common profit of the town of Bristol, as well as of your suburb, have begun a certain Trench in the marsh of St. Augustine's—which Trench indeed they cannot perfect without great charges; we therefore command you, that since, from the bettering of the said port, no small advantage will accrue, not only to the said burgesses, but also to you, who are partakers of the same liberties, and are joined
with them both in scot and lot, that you lend the same assistance as they do." On the details of the work history is silent; but this hint from the king seems to have established a unanimity of purpose amongst the merchants on both sides of the river, and the expenditure of £5,000 (a large sum at that time) in making the Trench enables us to estimate the extent of the energy of Bristolians in the thirteenth century. It was a spirited policy, at a time when the value of money was so much greater than now, for the merchants to set aside for this extension a sum equal in amount to the Customs of the city for a whole year in the time of Queen Elizabeth, more than three hundred years after.

THE BUILDING OF THE BRIDGES.

Old Bristol, from its situation, was a city of many bridges, but Bristol Bridge was the only one marked by any vigour of design or execution. The "honest men" of Bristol and Redcliffe having co-operated to cut the Trench, found the means of inter-communication inadequate, and carried their enterprise still further by projecting the bridge of 1247. It is to be regretted that our records do not state with certainty whether or not there was a bridge before that in 1247. Seyer thinks it in the highest degree improbable that the people would be content with a simple ferry, and quotes the words of William of Wyrcestre: "1275. The bridge of Bristol was first founded by King John of England, which contains in length 140 steps." Opinions on the other side are maintained by local historians, the most recent addition to existing theories being that of Bishop Clifford, to which we have already referred. However this may be, we find the citizens planning,
in the middle of the thirteenth century, a four-arched stone bridge, which was to span 165 feet of water; and at the commencement of the work we find that "the ships were now stopped from going up to unlade at the port of St. Mary. The New Back began now also to yield, as a place of wharfage, to the Quay, where the ships lay still and undisturbed by the current on a soft bed of mud, the small craft only coming to the Back."

It would scarcely be thought, judging by the bridge of the present day, that it could at any time have been described as a fashionable part, but, as in the case of old London Bridge, the builders of the bridge having very narrow views about space, concluded that the site would be a good one from a hygienic stand-point, and erected houses five storeys high, facing each other, across a thoroughfare 19 feet wide. These houses were not built upon the bridge itself, but, being an after thought, were erected by turning secondary Gothic arches opposite the old ones. Consequently, the first step into a shop was on the timbers, where the floor alone was between the feet and the water,—"through the crevices of which," Seyer remarks, "the wind blew up in a manner which would be intolerable to our warm modern shopkeepers." The houses commanded the highest rents in the city, and were inhabited by the wealthiest tradesmen. Seyer's comment on the peculiarity of the position is amusing:—"It has indeed occurred that the mast of a vessel came thro' a kitchen window, and even rose up thro' a shop floor, &c., 'but such events were unusual!'"

That this street, with houses similar to those of Paris or Edinburgh, on each side of a passage of nineteen feet should be dark is scarcely to be wondered at, and this must have been rendered still worse by the chapel, which, more than a
hundred years after, (1361) was built across the middle of the bridge by Edward III. and his Queen Philippa. With all its disadvantages, however, the bridge was destined to serve the purposes of the citizens for more than five hundred years, and it was not till 1760 that the work of 1247 gave place to a bridge more in accordance with modern requirements. In that year an Act was obtained authorising the erection of a new bridge, and after the rapid demolition of the old bridge, the construction of the new one went on for six years—a temporary bridge being used in the meantime. In September, 1768, a year after the last stone was set in the centre of the three arches, the bridge was completed, having cost the city £49,800. On June 8th, 1784, the bridge was re-opened after being widened to 60ft., the approach from Baldwin Street having also been considerably improved. To the other bridges of the city no special interest attaches beyond the enumeration of them.

In 1314 the eight bridges of Bristol were Bristol Bridge; St. Giles's Bridge, at the foot of Small Street; Froom Bridge, under Christmas Street; Monken, afterwards Bridewell Bridge, leading to St. James's Priory; Aylward's Bridge, at the foot of the Pithay; a bridge in Merchant Street, leading northward from the Castle; Ælle Bridge, at the end of the Broad Weir, leading to Ellbroad Street; and Castle Bridge, leading out of the Castle into the Old Market. The Drawbridge was not built till 1714, up to which time the Cathedral was reached from the centre of the city, via Christmas Street and Host Street. It cost in the first instance £1,066, and was widened in 1796. In 1868, having been in a defective condition for some years, a new Drawbridge (weighing 130 tons) was opened, the improvements being its greater width, and an easier method of opening.
EIGHTY YEARS OF MISFORTUNE.

The time of advancement and enterprise was followed by an unfortunate era of difficulty and depression. The period commenced with a season of famine, during which it was recorded that wheat was sold in Bristol at 16s. a bushel, and the country was agitated by the civil war made by the barons upon Henry the Third. Bristol was disloyal to the Prince, afterwards Edward the First, in this conflict, but in the seventh year of his reign we are told that four Bristol ships did a deed that was well accepted by the king, in making prize, near the Island of Scilly, of a ship in which was the intended spouse of Llewelin, Prince of Wales, Eleanor, the daughter of Simon de Montford. Probably the fifty thousand pounds sterling as ransom for his bride, and the £1,000 per annum that Llewellyn had to pay, were also "well accepted by the King." Apparently the Bristolians of this time were always quarrelling either with the Lords of Berkeley or the King. For a while they were dispossessed of their charter, "which they had forfeited by encroaching on the rights of the Constable of the Castle," and it is not probable that trade advanced much under these disquieting circumstances. But bad as matters were under the first Edward they were worse under the second. In 1314 the tolls on the market and the custom levied on the shipping led to a riot, and for two years Bristol must have been anything but a desirable place of residence, the burgesses at last buying peace in 1316 with a fine of 4,000 marks. In this year also the principle of protection was recognised in an export duty of half a mark paid on every sack of wool carried out of the port. Bristol had more than its fair share of the troubles that marked the reign of Edward II.
A HUNDRED YEARS OF PROGRESS.

With the accession of Edward the Third, Bristol shared fully in the benefits that accrued to the country. In the third year of the reign the mayor and burgesses had a charter given them, comprising all the rights and liberties acquired by previous charters. The prosperity of the town is shown by a quotation given in Evans's history of prices for the year: wheat is quoted at 3d. a bushel. About this time the king granted the town, by letters patent, an aid for the purpose of repairing the walls of the Quay; to be collected from all ships and boats laden with merchandise, from some one penny each and from others twopence each. The aid was to continue for six years. Certainly the amount of shipping must have been considerable for the "aid" to be worthy of the name; and that the shipping was warmly encouraged is sufficiently shown by a connection with shipping being considered a necessary qualification for membership of Parliament. When Edward the Third called upon Bristol to send two burgesses for the consideration of some "difficult and urgent business," he strictly enjoined the sheriffs that they should "cause to be chosen two burgesses out of the more discreet and sufficient men, who have the best knowledge of navigation and exercise of merchandise." What this "difficult and urgent" business was is, of course, mere conjecture, but it is certainly a fair inference that it was connected with the raising of a national fleet, and that the Bristol burgesses were wanted for the purpose of stating the shipping resources of the city, since we find in 1347 Bristol ships and Bristol men well represented at the siege of Calais. The roll of Edward's fleet at the siege, places Bristol well into the second place, and running London hard for the first:—"London, 25 ships, 662
men; Bristol, 23 ships, 608 men; Weymouth, 20 ships, 204 men; Poole, 4 ships, 94 men; Tyne, 4 ships, 62 men; Wareham, 3 ships, 59 men; and Seaton, 2 ships, 25 men.”

It was in reward of such efforts as this that Bristol was honoured with its still existing privilege of being a county in itself.

With one sad exception—the terrible outbreak of plague in 1348, when the grass is said to have grown several inches high in High Street and Broad Street—Bristol under Edward the Third flourished exceedingly; the shipping increased, and at least one new trade, the manufacture of woollen cloth, was established, and so rapidly did it assume importance, that in the same reign the weavers were allowed to elect four of the city aldermen. A very practical and utilitarian age, apparently, but the age also in which, according to the best authorities, William Canynge the elder founded the present Redcliff Church.

The prosperity then acquired did not lessen in the succeeding reigns, when the honoured name of Canynge is oft repeated in local history. Bristol was the second city in England, and proved its rank not only by supplying the king’s ships, as in 1347, but by the heavy loans of money granted to the king in 1377 and 1386, and there are now standing many records of the wealth and liberality of Bristol merchants in the latter part of the fourteenth century.

It is interesting to fix the time of Bristol’s greatest prosperity by remembering it was contemporary with Chaucer and Wycliffe, and for the matter of that with Falstaff and young Prince Hal, with Poins, Bardolph, and sweet Anne Page.

Bristol had energy enough in these days. It petitioned Parliament and caused the river Avon between Bristol and
Bath to be cleaned out, so that merchandise could be again sent by water; it endowed and built many of the city churches, and often proved its loyalty by loans or gifts to the king, and it was at this time, in the reign of the conqueror of Agincourt, that there was growing up in Bristol a merchant of national and more than national fame, whose fortunes were so connected with those of the old city that he deserves special mention.

**CANYNGE, THE MERCHANT PRINCE.**

William Canynge the younger, five times Mayor of Bristol, twice Member of Parliament for the city, entertainer of Royalty, and owner of a fleet, has been described as the greatest English merchant of the fifteenth century. Canynge was cosmopolitan. He stands out, like Saul, head and shoulders above his contemporaries, as a man of surprising energy and unbounded enterprise,—a man, indeed, far in advance of his times. He did not confer benefits on Bristol alone, nor confine those benefits to his own country. He alone was excepted in King Henry’s treaty with Christian, Prince of Denmark, which prohibited our trading to Iceland, Halgesland, and Finmark, “the Danish king allowing the Bristol merchant, in consideration of the great debt due to Canynge from his subjects of Iceland and Finmark, to lade certain English ships with merchandise for those prohibited places, and there to lade fish and other goods in return;” and in 1449 Henry VI. asked favour for “his beloved eminent merchant of Bristol” from the Master-General of Prussia and the magistrates of Dantzic.

Sprung from a line of successful and wealthy traders, William Canynge added honours to the family name which,
for business "push" combined with high moral and religious principle, gives special lustre to Bristol's history in the fifteenth century. His election as bailiff in his thirty-third year, and his appointment to the mayoralty a second time before he had passed his fiftieth year, mark Canynge as a man held in high esteem by his fellow-citizens, and the appreciation of his conduct as mayor is sufficiently evident from his election to Parliament in 1451, and re-election in 1455—responsibilities undertaken and discharged so well that in the following year (1456) the office of mayor was once more thrust upon him. It was during this year that Margaret of Anjou, Queen of Henry VI., visited Bristol, and was entertained, with a long retinue, by the Corporation, with William Canynge at their head. And when, four years after, King Edward IV. included Bristol in a tour of visits, Canynge was again the chief magistrate upon whom the toils and honours of royal entertainment fell; and the architectural beauties of he Redcliff Street mansion, where the king stayed, have repeatedly been the subject of admiring comment.

Special distinctions such as these are marks of special desert, and it is peculiarly in his connection with shipping that the merchant prince is prominent.

In these days capitalists employing one or two hundred hands are looked upon as traders on an extensive scale; but William Canynge needed as many as 800 mariners for the ten ships which he owned at the visit of the king. His ships were: The Mary Canynges, 400 tons; the Mary Radclyf, 500 tons; Mary and John, 900 tons; the Galyot, 150 tons; the Katharine, 140 tons; the Mary Batt, 220 tons; the Little Nicholas, 140 tons; the Margaret, 200 tons; the Katharine of Boston, 220 tons; and
a ship in Iceland (which was lost) 160 tons—a total of about 3,000 tons of shipping, and with these he traded, with unusual spirit, to many foreign ports. Again in 1466, Canynge’s fifth and last year of mayorality is marked by a feature of historical importance, the ordaining of certain rules for the guidance of the merchants.

At the close of his life, practical in his business habits and modes of thought as he must have been, this merchant prince becomes the priest of Westbury College,—turns from the mart to the church, from the rush and activity of public life to the contemplation of the cloister; from ships to solitude; from the ledger and tonnage register to the writings and thoughts of priests and friars. Here is an interesting letter on Canynge’s denunciation of pomp and vanities, with which the boy-poet deceived Horace Walpole and the world:

“Now, broder, yn the chyrche I amme safe, and hallie prieste unmarriageable. The Kynges servitoure attended me to telle, giff I would dyscharge the 3,000 marks I should ne bee enforced on a wyfe, and also have mie shypyne allowed. I made answere, I was now yshorne a preest, and motte notte be wedded. I have made a free guifte of the markes, and wanted but a contynuance of mie trade. Alle ys welle; the Kynge is gone, and I am hallie.”

“W. CANYNGES.”

The three thousand marks (£20,000 in modern currency) is generally, though not universally, regarded as a fine imposed by the king upon Canynge for Lancastrian sympathies. What he earned by his ships the merchant was undoubtedly liberal in spending upon works of benevolence, and particularly upon the church. His exact share in the renovation of St. Mary Redcliff will never be proved to the satisfaction of
all who have made it a subject of study, but he may be credited with a special interest in the building, even though doubt has been thrown upon the claim that he was "inter æteros specialissimus benefactor ecclesiae de Redcliffe." It is upon an altar-tomb in the south transept of St. Mary Redcliff (where Canynge and his wife are interred) that the following inscription is to be found:—

"Mr William Cannings, ye richest marchant of ye town of Bristow; afterwards chosen 5 times Mayor of ye said towne; for ye good of ye commonwealth of ye same: he was in order of priesthood 7 years, and afterwards Dean of Westbury, and died ye 7th of Novem. 1474, which said William did build within ye said towne of Westbury, a colledge (with his cannons) and the said William did maintain by space of 8 years, 800 handycraftsmen, besides carpenters and masons, every day 100 men. Besides King Edward the ivth had of ye said William 3,000 marks for his peace, to be had in 2470 tons of shiping."

This statement of facts is relieved by the following versification:—

No age, no time can wear out well-woon fame,
The stones themselves a stately work doth shew,
From senseless grave we ground may men's good name,
And noble minds by ventrous deeds we know.
A lanterne cleer setts forth a candel light,
A worthy act declares a worthy wight;
The buildings rare, that here you may behold,
To shrine his bones, deserves a tomb of gould,
The famous fabricke that he here hath done,
Shines in its sphere as glorious as the sonne;
What needs more words, ye future world he soughte
And set ye pompe and pride of this at noughte:
Heaven was his aime, let heaven be still his station
That leaves suche worke for others imitation.
To such men as William Canynge the younger the credit must be given of making possible to the port the more rapid developments of later years. At a time in England's history when the darkness of superstition rendered commerce extremely difficult, his mind, beyond others, grasped the capabilities of the Avon, and he led the way in a surprising policy of merchant venture which roused his contemporaries to more energetic trading, and established Bristol as a port of first-class importance when all places were passing through the trial of a deadening lethargy that remained undisturbed till nearly a century later.

THE AGE OF MERCHANT PRINCES.

It would be difficult to say where Bristol trade did or did not go when the city was in the height of prosperity, but by incidental references we find that there was a great sale of Bristol drapery at Bayonne, and those who may be still opposed to free trade may perhaps give the citizens great credit for, in 1467, bitterly complaining that sheep from England were sent to Spain. About the same time, also, the trade between Bristol and Thule, in Iceland, was noticed by no less a man than Christopher Columbus. Robert Strange, one of the leading Bristol merchants in the reign of Edward the Fourth, who was mayor more than once, and who, says William of Worcester, his contemporary, "had twelve ships at one time," experienced an adventure, quaintly recorded by an old chronicler, that throws considerable light upon the disadvantages of fifteenth century society. "This year one Sywbarbe caused Robert Marks, a townsman, to accuse Robert Strange, who had been Mayor, of coining
money, and for sending of gold over the sea unto the Earl of Richmond; wherefore the King sent for him (Strange) and committed him to the Tower, where he remained seven or eight weeks; but when the truth was known, his accuser, Robert Marks, was had to Bristol, and hung, drawn, and quartered for his false accusation.” It would be interesting to know who or what was Sywbarbe, and what was his fate. Robert Strange was Mayor again three years later, in 1482, and in this year Dundry Church, so familiar and prominent a feature in the landscape south of the city, was erected.

It is surprising how many of the almshouses and churches were endowed by this generation of Bristol merchants. In Pryce’s History of Bristol many interesting particulars are given of the estate of John Foster, the founder of the Steep Street almshouse, and a prominent Bristol merchant. He lived in Small Street, and we are told that his house consisted of a hall, parlour, buttery, kitchen, one chief or best chamber with two others, and three cellars. In these cellars there is said to have been two hundred tons of salt, and as that would be a rather large quantity for domestic purposes, it is supposed that his worship traded in salt.

Apropos of this period, we find it recorded that the great flood of October, 1484, that checked the progress of the Duke of Buckingham on the banks of the Severn, was also serious in Bristol, where more than 200 men, women, and children were drowned, and the merchants’ cellars suffered much damage. Several ships were lost at Kingroad.

And so, with some reverses and many successes Bristol kept in the front rank of English cities in the days when the middle ages were passing away; and when the enterprise of Columbus and Cabot opened fresh fields of adventure and
new means of acquiring wealth, Bristolians took an active part in the new era that dawned upon the world.

THE CABOTS AND THEIR EMPLOYERS.

On the 24th of June, 1497, the Matthew, manned by Bristol sailors, and having on board Sebastian Cabot, the Bristol navigator, first touched the shores of America, having left Bristol, it is conjectured, about the 2nd of May the same year. As now with the great Arctic enigma, so then bold minds were stirred with a longing to probe the North Western mystery, and thus reach India by a shorter route.

Recollections of the deeds of Columbus, Vespucci, and the many brave adventurers of that period, whose time, resources, and ability were devoted to this work, fill the mind at the suggestion, and the story of the Cabots in their association with the port of Bristol is of special interest and importance, with which every loyal citizen ought to be familiar.

What was the date of the first sailing of the Matthew from this port? What is the first unquestionable date on which the Cabots touched the mainland of America? How much of the credit is due to John Cabot, and how much to his son Sebastian? How old was Sebastian at the time of the discovery? Was Sebastian a Venetian or Bristol born? What share did Bristol merchants and Bristol mariners take in the discovery? These are questions on which the true historian spirit delights to enlarge, and many have been the probable and improbable conjectures; but it seems at any rate a fact, accepted by all chroniclers as beyond a shadow of a doubt, that Sebastian Cabot and his father were the first to land on the shores of America at midsummer of 1497. One of the latest and best testimonies—the more authoritative because
American, and therefore unbiassed by local feeling—is that of William Cullen Bryant and Sydney Howard Gay, in their admirable history of the United States, in which they say that "even if it were possible to reconcile beyond all cavil the rival claims of Columbus and Vespucci, there is a third who takes precedence of both as the first great captain who pushed far enough into the unknown seas to touch the mainland of the new continent. It is conceded that a voyage was made as early as 1497 by John Cabot, accompanied by his son Sebastian. In a little vessel called the Matthew he made his first landfall on this side the Atlantic on the 24th of June of that year. These Cabots, then, were the first discoverers of the continent, about a year before Columbus entered the Gulf of Paria, and two years before Ojeda's fleet, in which Vespucci sailed, touched the coast of South America two hundred leagues further south." But though the Cabots were the leaders, in any case, by a full year, the disputed voyage of 1494, is a subject on which there are definite and contrary views. The material for argument is slight, resting upon a map discovered twenty years ago (now in the Imperial Library at Paris), which, claiming to be the work of Sebastian Cabot, "Captain and Pilot-Major to his Sacred Imperial Majesty the Emperor, Don Carlos," describes Newfoundland thus:—

"This land was discovered by John Cabot, a Venetian, and Sebastian Cabot his son, in the year of the birth of our Saviour Jesus Christ, M.CCCC.XCIII (1494), the twenty-fourth day of June (at five o'clock) in the morning; to which land has been given the name of The Land First Seen (terram primum visam); and to a great island, which is very near the said land, the name of St. John has been given, on account of its having been discovered on the same day."

Mr. Bryant and Mr. Gay go to the length of suggesting that "III." is a misprint for VII," on the authority of
Hakluyt, who, in a professed translation of an “extract taken taken out of the map of Sebastian Cabot, cut by Clement Adams, hung up in the Privy Gallery at Whitehall,” says, “In the year of our Lord, 1497, John Cabot, a Venetian, and his son Sebastian (with an English fleet set out from Bristol) discovered that land which no man before that time had attempted.” This may be accepted as an ingenious conjecture which students of the subject are at liberty to doubt, seeing that the same writers quote Hakluyt’s manuscript giving the credit of the discovery to “Sebastian Gabote, an Englishman born in Bristow,” in 1496, and admit that the main difficulty is to reconcile Hakluyt to himself. Those who are interested in the point are free to believe, with these materials, either that there was a successful expedition in 1494, of which we have no particulars whatever, and a second in 1497 or that the discovery of 1494, is a myth, and that the expedition three years later is the only genuine one. That of 1497 is referred to at some length by several contemporary authorities, among them Lorenzo Pasqualigo, who says:

“The Venetian, our countryman, who went with a ship from Bristol in quest of new islands, is returned, and says that seven hundred leagues hence he discovered land, the territory of the Grand Cham; he coasted for three hundred leagues and landed; saw no human beings, but he has brought hither to the king certain snares which had been set to catch game, and a needle for making nets; he also found some felled trees, wherefore he supposed there were inhabitants, and returned to his ship in alarm. He was three months on the voyage, and on his return he saw two islands to starboard, but would not land, time being precious as he was short of provisions... The king has also given him money wherewith to amuse himself, and he is now at Bristol with his wife, who is also a Venetian, and his son. His name is Zuan Cabot and he is
styled the Great Admiral; vast honour is paid him; he dresses in silk, and these English run after him like mad people, so that he can enlist as many of them as he pleases, and a number of our own.'

The Spanish and Venetian ambassadors of the time are equally explicit in their despatches. The Venetian closes his account with the words "Next spring his Majesty (Henry VII.) means to send him with fifteen or twenty ships."

The expedition of 1497 is a fact corroborated by many witnesses, some of whom look upon it as the first discovery. And it is evident from the dispatch of the Spanish Ambassador to which reference has already been made, in which he states that for seven years before 1498, the people of Bristol had been annually sending out two or three or four light ships, caravels, in search of the island of Brazil and the Seven Cities, that if the landing of 1494 were a probability, there ought to be something more than the date upon the chart, unauthenticated by any details of the voyage. At that time the spirit of adventure was abroad, and the eyes that were turned so eagerly towards the new land could not fail to have taken cognisance of the first landing on the trans-Atlantic coast. Are there no local antiquarians who can throw more light upon the point from their stores of old MSS.? The subject is one of unusual interest to the student of Bristol's history.

Historians having made their choice of date for the discovery of the Cabots, seem to be compelled to part company on the question of Sebastian's age. Those who decide against the discovery in 1494, say that Sebastian was only twenty years of age in 1497, so that a lad of seventeen could scarcely be coupled with his father in the way set forth in the map. But, on the other hand, a youth of twenty, unless he were of
unusual natural precocity, could scarcely be described as his father's partner in a work of such magnitude. There appears, also, to be a reliable date as against the various suppositions of Sebastian's youth. After some years of residence at Bristol, John Cabot returned to his native place, Venice, and Eden, Sebastian's friend, says "Sebastian Cabot told me that he was borne in Brystowe, and that at iiiij yeare oould he was carried with his father to Venice, and so returned agayne into England with his father after certayne years, whereby he was thought to have been born in Venice." John Cabot is known to have become a Venetian citizen in 1476, which would place the date of Sebastian's birth at 1472. In 1497, therefore, Sebastian would be twenty-five years old, an age at which he might more reasonably be expected to play that part which, from the records of the time was indubitably his in the discovery of 1497.

On the question of Sebastian's birthplace few words are necessary. Peter Martyr's statement that Sebastian was "a Venetian born," must be set against that of Eden, both being Cabot's friends, and it is found that while Martyr only makes the assertion, Eden specially corrects a generally prevailing impression that Sebastian was born at Venice. There seems to be no room for doubt that he was the Bristol-born son of a Venetian, and that his association with Bristol may be said to mark this city as his native place. But the matter has very little to do with Bristol's credit in the expedition, the most important facts being the setting out from this port of the first vessel from which the mainland of America was sighted, and the activity displayed by the citizens in the adoption of measures which rendered the achievement possible.

In one sense, the casting-off of the Matthew from the quay-
side was only a repetition of what had been done in Bristol for several years before. The citizens did not borrow their enthusiasm for exploration from the projected expedition for which the Cabots received the Royal Patent. The cheers and "God-speeds" which echoed in the ears of the Matthew's commander and crew as they left Bristol on their outward voyage, had already infused courage into earlier explorers, and these previous ventures, unrecorded though they are, may be regarded as the direct cause of the selection of Bristol as the favoured port in King Henry's patent. It recommended itself as the place where love of adventure and commercial energy had combined to produce practical results in repeated and costly efforts in seeking for unknown lands, and the king therefore felt no hesitation, after John Cabot's "reasonable demonstrations," in granting a patent on March 5th, 1496, giving to him, and to Lewis, Sebastian and Sanctus, his sons, "full and free authority to sail to all ports, countries, and seas of the east, of the west, and of the north, under our banners and ensigns, with five ships, of what burthen or quality soever they be, and as many mariners and men as they will take with them in the said ships, upon their own proper costs and charges, to seek out, discover and find, whatsoever isles, countries, regions, or provinces, of the heathen and infidel, whatsoever they be, and in whatsoever part of the world which before this time have been unknown to all Christians. . . . Yet so that the said John, of all the fruits, profits, and commodities growing from such navigation, shall be held and bound to pay to us, in wares or money, the fifth part of the capital gain so gotten for their every voyage, as often as they shall arrive at our port of Bristol (at which port they shall be obliged only to arrive). . . .
We giving and granting unto them and their heirs and deputies that they shall be free from all payments of customs on all such merchandise they shall bring with them from the places so newly found."

The five ships, however, dwindled down to one—The Matthew—for the manning of which, if we consider what Pasqualigo says of John Cabot's popularity and the ease of enlistment on his return, he was no doubt indebted to a large extent to that restless spirit which had for years existed in Bristol. And the difficulties and hardships of that voyage in unknown waters; of that coast voyage of nine hundred miles, where every movement must have been made in complete ignorance and at the risk of life; and of that brave and successful endeavour to open up a land which, throughout its vast territory, now throbs with life, are summed up in a brief explanation, that "seven hundred leagues hence he discovered land and coasted for three hundred leagues."

An analysis of the claims of John and Sebastian Cabot to the credit of the discovery will do nothing to remove the popular conviction that Sebastian was the great navigator. As history describes the two men, a momentary glimpse is obtained of John Cabot on his removal from Venice to London, and from London to Bristol, and it is known that he was learned in cosmography and was an accomplished navigator. Then he disappears altogether. At one moment he springs into historical notoriety as the commander of an expedition which solves the great geographical problem of the period, and as suddenly vanishes from sight, leaving his son Sebastian to win, for his own name, the enduring reputation of which the father was able to lay only the foundation.

Cabot, the elder, shines brilliantly for a few short months
as the skilled mariner who recommended himself to the Merchants of Bristol and to royalty, and carried an arduous undertaking to a splendid success. To him the entry in the Privy Purse Expenses of King Henry is supposed to refer:—

"10th August, 1497. To hym that found the New Isle, £10."

And as honours begin to crowd upon him, John Cabot steps out of the race, and his son enters upon the work in his stead. The father in a few short weeks, startled the world with an achievement of superlative importance; the son, associated with him by name in that work, adds to his credit a life's labour of sixty years in the cause of discovery. Cabot the elder planned the campaign; Cabot the younger carried it out during more than half-a-century of persevering toil. The \textit{victories} of the first expedition is shared by both, and even given by some historians to Sebastian alone, but there is no doubt that to him only is due the honour of the second voyage in 1498. These reasons may be regarded as to some extent explaining why it is that the name of Sebastian Cabot is so universally recognised in connection with the discovery of America, while that of John Cabot, the undoubted commander of the "Matthew," is comparatively unknown.

That it was John Cabot's intention to still further prosecute the work he had successfully begun is evident from the despatch of the Venetian ambassador in 1497, in which he speaks of the king's intention "to send him with fifteen or twenty ships," while Pasqualigo also writes: "The king has promised that in the spring our countryman shall have ten ships, armed to his order, and at his request has conceded him all the prisoners, except such as are confined for high treason, to man his fleet."
The energetic Venetian even went so far as to obtain, on the 3rd of February, 1498, a second charter from king Henry, giving power to "John Kabotto, Venecian," to take six English ships—of 200 tons and under; "and them convey and lede to the Londe and isles of late founde by the said John," but of this expedition the chronicles concur in saying that Sebastian was the captain. With two ships, having on board 300 men, besides his crew, and accompanied by three or four small ships bearing wares for trading, he set sail from Bristol in the spring of 1498. Directing his course by Iceland, he reached the coast of Labrador, which he named Baccalaos, because "in the seas thereabout were multitudes of big fishes that they call tunnies, which the inhabitants call Baccalaos, that they sometimes stopped his ship!" and in a two thousand mile voyage of surprising energy, he examined the coast line from the latitude of $67^\frac{1}{2}^\circ$ north to $38^\circ$—from a more northern point than Hudson's Bay, with its "heaps of ice swimming in the sea," to a point further south than Philadelphia—and having, after a vain attempt at colonisation, re-embarked his three hundred passengers, he was compelled by a mutinous crew and failing provisions to give up the hope of finding the western passage to the Cathay, and sail for Bristol.

How much of his long and useful life was spent at Bristol, which—with the exception of his sojourn in Spain—he made his home, and how that life was spent is only hinted at in a few facts. But his public work was of immense service to the world. It appears certain that Sebastian again set forth in an English expedition for the American Continent in 1516 or 1517. His reputation as a navigator is proved by his appointment to the office of Pilot-Major to
Charles of Spain in 1518, and after eight years he sailed as leader of an expedition to the Rio de la Plata—the Bristol merchant, Robert Thorne, then living at Seville, approving of and taking a share in the venture. The discoveries and disappointments of that voyage are fully narrated by the historians, and in the year 1540, having wearied of Spanish intrigue, he returned to his old English home at Bristol. Here he appears to have at once taken up a position of first class importance, substituting in the following year (1549) for the pension of Spain, an annuity of £166 13s. 4d. from king Edward, as Grand Pilot of England, and being also made governor for life of the Russia Company.

Of the activity which he displayed in his later years; of his appointment as first governor of the Society of Merchant Adventurers; of the expeditions to Russia (1553) and other parts, with which he added materially to the prosperity of the country, the records are copious; and at the close of a career of unusual length and usefulness, in 1556, we still find the "goode olde gentleman" on board the "Seathrift," previous to its departure for the north, distributing alms to the poor, and wishing them to pray for "good fortune and prosperous successe." The date and place of his death and burial are equally unknown. Eden says nothing of either, though he knew sufficient to tell how the venerable mariner's thought ran in the old groove till life ceased, and in his last moments spoke "flightily about a divine revelation to him of a new and infallible method of finding the longitude, which he could not disclose to any mortal." Sebastian had his biographers, but none of them was a Pepys or a Boswell, and his admirers must be content with a more lasting memorial than a tombstone,—a life opening with the grandest discovery in nautical annals,
and unspARINGLY devoted to the highest and best interests of mankind. One of the best biographies of these great navigators is undoubtedly that of Mr. J. F. Nicholls, City Librarian.

But while we give all credit to the Cabots for their splendid services, we must, in justice to the Bristol merchants of the period, ask who fitted out the Matthew? The king, as we have seen, kept himself clear of the expenses of the expedition, and as it is certain the Cabots had no fortune wherewith to fit out vessels of discovery, we are compelled to go back a chapter to find the heroes of enterprise whose enthusiasm and love of adventure led them to incur the great expense of providing the vessel, with its stores and crew, which was destined to be associated with an event so remarkable.

In this antecedent chapter we come upon the names of two Bristol merchants, Thorne (the father of Robert and Nicholas, the founders of the Grammar School) and Eliot. In a very able letter written by Robert Thorne to Dr. Ley, ambassador of Henry VIII., there occurs this passage: "I reason that as some sicknesses are hereditarious, and come from the father to the sonne, so this inclination or desire of this discovery, I inherited from my father, who with another merchant of Bristowe, named Hugh Eliot, were the discoverers of the New found lands, of the which there is no doubt (as now plainly appeareth) if the mariners would then have been ruled, and followed their pilot’s minde, the land of the West Indies (from whence all the gold cometh) had bene ours." This was written in 1527.

Here we get a clear light as to the parties who were the originators of those great voyages of discovery which had their origin in Bristol. The letter we have quoted is a famous historical and perfectly authentic document. Mr. W. S.
Lindsay remarks, in his recently-published and invaluable work on "The History of Merchant Shipping and Ancient Commerce," that "the age produced no more shrewd and intelligent merchant" than the writer of the letter we have quoted, Robert Thorne. The Cabots, therefore, although they rendered priceless service, were merely the instruments in the hands of Bristol merchants; and the merchants who fitted out the Matthew were the elder Thorne and Hugh Eliot. The discovery of the mainland of America was due to these local worthies, whose names are too often overshadowed by those of the navigators they employed.

**THE MERCHANT VENTURERS.**

The Society of Merchant Venturers, as at present constituted, has been in existence since its incorporation by Edward VI. (1552), Sebastian Cabot being the first governor. In 1466, during the mayoralty of the second William Canynge, and doubtless owing to his influence, the merchants so far realised the strength of union that six definite rules were laid down for their guidance, including the appointment of a master, wardens, and beadles, the fine of a pound of wax for non-attendance at Spicer's Hall, and the penalty of a breach of the rules for selling to strangers any of the "four merchandises;" and it is alleged that these are only an improvement on the regulations of a guild which had existed many years before. Barrett, indeed, claims to have established the existence of such a guild in 1240, from his discovery, in a deed of that year, of a reference to "Seneschallos gildæ mercatorum."

The practical advantages of such a guild must have been great in the middle ages, or we should not find the merchants obtaining a charter from Edward the Sixth, to put
a check upon men who had never been apprenticed to merchants, and "with strange ships encroached upon the trade of the port." This charter incorporated the freemen of the city as the "Masters, Wardens, and Commonalty of Merchant Venturers of the City of Bristol," and was subsequently confirmed by Queen Elizabeth (1566) and King Charles I. (1638), under the last of which the present Society is established.

The Merchant Venturers possess manors and lands to the amount of upwards of £3,000 per annum, in trust for the maintenance and support of certain almshouses and other charitable purposes.

The "men with strange ships," however, no longer annoy the members of the guild, which is now chiefly known to the world through the medium of "caenobitical symposions," (so popular with the Antiquary) held at the hall in Marsh Street; and the Society is now one of those reminiscences of trading enterprise in connection with the port, to which nothing of special importance attaches beyond the fragrance of age, and numerous works of philanthropy, education, and charity.

It was in the principal apartment of the hall (which dates from 1701, and has been twice renovated since its building) that the merchants entertained Princess Amelia (1728), the Prince of Orange (1734), and George IV. (when Prince of Wales) in 1807.

**BRISTOL AND THE SPANISH ARMADA.**

Right sharp and quick the bells all night rang out from Bristol town,
And ere the day three hundred horse had met on Clifton Down.

Availing ourselves of the dramatist's privilege of annihilating time, the curtain which fell on Bristol at the beginning of the
16th century (the tableau being the triumphant return of the adventurers to the great new land beyond the sea) is raised after a supposed interval of half a century, and discovers the old city in the age of renewed chivalry and patriotism in the reign of the fair "Oriana" of the poets. It is the momentous year when the whole country is waiting for the great Spanish attack. Fear? Not much; as witness Francis Drake playing bowls at Plymouth, and finishing his game before getting ready for the battle. Rather, an anxiety for the foe to come and be conquered, and a vast determination to destroy the great power of cruelty and evil that Spain was in these times.

We find all the canvas brought to St. James's fair, bought and sent off to make tents for the camp at Tilbury; and on the 20th day of April "three serviceable ships and one pinnace," as one writer tells us, another supplying us with their names, the Great Unicorn, the Minion, the Handmaid, and the Ayde, well furnished with men and ammunition, sailed away down the river, watched from Clifton Down by who knows how many pairs of anxious eyes, and passed away into the Channel, thence to join the fleet that lay in Plymouth Sound.

Prosaic history gives but dates and facts; but it is no mere baseless fancy that pictures the citizens, as the summer went on, waiting with deepened earnestness for news of the approach of the Armada, and looking out at nights towards the high hills of Somerset to catch the first flicker of the signal fires that were to arouse the nation. Two lines given by Macaulay in his graphic description of that scene tell of the effect in Bristol when at last the fires were seen, and the answering signals had to be lit, and Bristol merchants rose up stern and calm to guard their homes. No mere idle fancy, surely, is that; and the picture is closed in happily by a note
of an old historian concerning November the 24th, 1588:—
“A general thanksgiving was celebrated in Bristol for the
defeat of the Spanish Armada. The Mayor, Robert Kitchen,
and incorporated companies attended the Cathedral to hear a
sermon, when the magistrates received the holy communion,
and upon their return home they, with other well-disposed
people, gave money to the poor.”

MARITIME EXPEDITIONS FROM BRISTOL.

Pepys, in his praises of the mixture of Spanish wine known
as “Bristol milk,” says the luxury was supported by a
thriving trade with the North American plantations, and with
the West Indies, and that the passion for colonial traffic was
so strong (about 1685) that there was scarcely a shopkeeper
in Bristol who had not a venture on board of some ship
bound for Virginia or the Antilles. And Macaulay, speaking
of Bristol towards the close of the 17th century, describes it
as the first English seaport. Pepys also comments on the
discreditable system of crimping and kidnapping, by which
Bristolians of that day did the work of colonisation; but
however that may be, the words of both writers mark the
existence of a strong spirit of adventure, and of this, from a
time before the Canynges, there is abundant evidence in
many maritime expeditions which left Bristol.

William Botoner gives an account of a voyage made by
Bristol men “in two ships of 80 tons, of Jay, junr., a
merchant, who began their voyage 15th July, 1480, at the
port of Bristol, in Kyngroad, for the island of Brasyle, taking
their course from the west part of Ireland, plowing the seas
through, and Thylde is master of the ship, the most skilful mariner of all England. News came to Bristol, Monday, 18th September, that the said ships sailed over the seas for nine months and found not the island, but through tempests at sea returned to port in Ireland, for laying up their ships and mariners."

It was men of such a restless spirit as Nicholas and Robert Thorne—founders of Bristol Grammar School, three hundred years ago—who would not be content with the circumscribed limits of the world’s trade as they found it. In Robert Thorne’s letter to Dr. Ley, which we have already quoted, there occurs this passage, showing how he and his partner were engaged:—"In a fleete of three shippes and a caranel that went from this city [Bristol] armed by the merchants of it, which departed in April last past [this was the expedition of 1526, in which Cabot discovered the river of Plate], I and my partener have one thousand four hundred duckets that we employed in the said fleete principally for that two Englishmen, friends of mine, which are somewhat learned in the cosmographie, should goe in the same shippes to bring me certain relation of the situation of the countrrey and to be expert in the navigation of those seas, and there to have informations of many other things, and advise that I desire to knowe especially. For," adds Robert Thorne, "if from the islands of Moluccas the sea doth extend without interposition of land to sail from north to north-east point 1,700 or 1,800 leagues, they should come to the Newfoundland islands that the English discovered, and so we should be nearer to the spiceries by almost two hundred leagues than the Emperor or the King of Portugal are."

The "inherited inclination and desire" further appear from
an old ledger book written about 1526 by Mr. N. Thorne the elder, "a principal merchant of Bristol," in which it was noted that, before that year, one T. Tison, an Englishman, had "found the way to the West Indies and resided there, and to him the said Mr. N. Thorne sent armour and other merchandize, whereby it appears that there was an established trade there very early, and from the City of Bristol."

The name of Eliot, mentioned by Thorne again occurs in local history connected with adventure; for in 1502 there is a record of a patent being granted to "James" Eliot and Thomas Ashurst, natives of Bristol, "to go with English colours in quest of unknown lands."

When Bristol was beginning to appreciate the value of the Newfoundland fisheries, her merchants gladly aided in the formation (1574) of the company for the colonisation of the northern districts of America, and subscribed £1,000 out of £4,000 towards the undertaking. Three years after, Captain Martin Frobisher, "in the Queen's ship called the Ayde, alias Anne, of the burthen of two hundred tonns, came into Kingroad, from his voyage attempting to find the north-west passage to the East Indies, China, and Catays." The Captain brought with him a quantity of supposed gold ore, stories of which, like the Australian goldfields twenty years ago, had fired adventurers to seek the new and beautiful land where the pure metal lay about in ready-made bars and ingots. But experiments on the ore proved that there was "but one half-penny worth of bread to an intolerable deal of sack," the infinitesimal particles of silver extracted from two cwt. resembling a mathematical point as far as parts or magnitude were concerned. But the gold ore was not everything, and

"In the year 1578, Mr. Anthony Parkhurst, gentleman, of Bristol, who had been four years at Newfoundland and had accurately searched
the island, sent Mr. Hackluit a letter dated from Bristol, in which he
describes the great increase of the fishery or the number of vessels
resorting thither, and a natural history of the island. Sir Francis
Walsingham, 11th March, 1582, wrote to Mr. Robert Aldworth, then
Mayor and a merchant of Bristol, commending his good inclination to
the Western discovery, and recommending to add the two ships or barks
he was then fitting out to the fleet of Sir Humphrey Gilbert, to which
the said Mr. Aldworth replied that the Western voyage intended for
the discovery of the coast of America to the south-west of Cape Breton
was well liked there, that the merchants of Bristol subscribed 1,000
marks immediately to it, and that they would furnish a ship of 60 and a
bark of 40 tons."

In 1594 the Grace of Bristol sailed on the 4th April from
Bristol into the great river of St. Lawrence for the fins of
whales and train oil, as far up as the island Nantiscot, and
returned to Hungrood 24th September the same year. Nine
years after (1603) Martin Pringe sometime general to the East
Indies, set out, when he was 23 years of age, on a voyage
for the discovery of the north-west passage, planned by the
local worthies, John Whitson and Robert Aldworth—men of
the Thorne type. Pringe’s epitaph speaks thus:

His painful, skilful travels reached as far,
As from the Arctic to th’ Antarctic star;
He made himself a ship—Religion,
His only compass, and the truth alone
His guiding cynosure; faith was his sails,
His anchor hope—a hope that never fails;
His freight was charity, and his return
A fruitful practise.

The spirit of maritime adventure is equally shown in the
settlement formed by Bristolians at the beginning of the
seventeenth century in Newfoundland. “One Mr. Guy,
member of the Council, and Mayor in 1618, took out a
number of persons of both sexes in 1609, to form a settlement all the winter. He procured a charter and license of the King (James) for his intended plantation, having some rich merchants of London, as well as Bristol, joined with him, for the better and more effectual prosecuting of the scheme. Many of this city did advance money towards it; and so, Mr. Guy with some other young merchants, being fitted out with more men, and all necessaries, took shipping here for Newfoundland, to make a trial of the place.” Mr. Guy, as “a man very industrious and of good experience,” was appointed General, and after “hennes, duckes, pigeons, conies, goats, kine, and other live creatures” had been transported to the Bristol colony, they came to the conclusion that “the soil and clyme agreed very well with them.”

In 1631 the Merchant Adventurers of Bristol associated for the purpose of sending an expedition of discovery, with a view of finding a passage into the Pacific Ocean, either by the north-east, round the extremity of Asia, or by way of America, on the north-west. King Charles was greatly interested in this, and Captain Thomas James was introduced to him. The Captain sailed from Kingroad, May, 1631, having on board the Henrietta Maria—of 80 tons—20 men and 2 boys, and he published “The strange and dangerous voyage of Captain Thomas James, in his intended discovery of the North-West Passage into the South Sea.” He passed through Hudson’s Straits, but finding a complete block of ice, turned to the southward, and searched the coast in vain. They spent the winter in two or three miserable huts, and in July, 1632, set sail again. They coasted the western shore to no purpose, and then went northward, but ice again checked their progress, although they got as far as
65° 30', and he turned his course for Bristol, reaching this port on the 22nd October. Early in the same year, Robert Aldworth and Giles Elbridge obtained a patent by which they secured 12,000 acres of land in New England on the Prim-aquid, and 100 acres for every person conveyed by them to New England within seven years, on the condition that they remained three years. These efforts towards the colonising of Virginia were not without result, as the arrival at Bristol in two days (1666) of twenty-three Virginia ships laden with tobacco, sugar and other produce, may be held to prove. These instances, a few out of many, are a proof that the spirit and energy that laid the basis of our immense mercantile marine from the fifteenth to the seventeenth century, were specially strong in the people of Bristol, and that they were foremost in the search for new places to which the commerce of England might be extended, and her name and fame thus established on the most enduring foundation. But there were expeditions of other kinds from Bristol than those of mercantile adventure and discovery. Going back a little in date to the early part of the reign of Henry VI., we find records of the expeditions of pilgrims from Bristol to Compostello, in Spain, whereunto they were encouraged by the Pope, and Mr. Taylor in his "Book about Bristol," quotes from Rymer's "Fœdera," the names of various ships and shipmasters who received the Royal license to carry pilgrims to the coast of Spain, from whence they travelled inland thirty or forty miles—

With a scallop shell in the hat for badge,
And a pilgrim's staff in hand.
HISTORY OF THE PORT OF BRISTOL.

A.D. 1428—Thomas Fish. 100 Pilgrims. St John of Bristol.
—Wm. Coton.
—Jordan Spryngge 100 Pilgrims. Mary of Bristol.
—John Monke.

1434—J. Woderoufe 80 Pilgrims. Christopher of Bristol.
—W. Weston 60 Pilgrims. Trinity of Bristol.
1448—Henry May 120 Pilgrims. Mary of Bristol.
—John Burton 100 Pilgrims. Catherine of Bristol.

Between the second and third groups of pilgrims, i.e., in 1446, a memorandum is given by William of Worcester, that in that year, before the festival of St. James, Robert Sturmy (pointed out as the Stormy of the above list), a merchant of Bristol, commenced a voyage to Jerusalem with 160 pilgrims. The out voyage was accomplished successfully, but in returning, the ship, Cogg Anne, struck upon a rock during a tempest off the Island of Modo, in Greece, on the night of December 23rd, and 37 of the mariners and pilgrims were drowned, "to the great sorrow of their wives and friends at Bristol."

It may be noted that in 1459 Robert Sturmy, of Bristol—probably the worthy man did not care which way of the three his name was spelt—was plundered in the Mediterranean by the Genoese, and to avenge the loss sustained by the Bristol merchant, who had been Mayor in 1453, the king arrested the Genoese merchants in London, seized their goods, and imprisoned them until they gave security to make good the loss; "so that they were charged with £6,000 due to Mr. Sturmy."

Bristol was famous for producing a very different kind of pilgrim in the sixteenth and seventeenth century, when as an out-come of the adventurous spirit that as we have seen...
prompted merchant seamen to go in search of the North-West Passage, or for undiscovered lands, in ships no bigger than modern coasting vessels. There was many a vessel put to sea with the avowed intention of getting some of the stores of wealth supposed to be on board Spanish vessels, to get it peaceably if possible, but to get it. Between this class, and many of the first class mentioned in connection with local maritime expeditions the gradations are very fine, and the classes are often insensibly merged.

In those days, when the world adopted "the good old rule the simple plan, that he shall take who has the power, and he shall keep who can," sailors going to search for gold at the Spanish main were not at all bounded in their objects, and would not hesitate to go out of their way to have a fight with a national enemy.

The old rule of giving ships to the King for his battles was supplemented by the voluntary efforts of merchants, who sent their ships away fitted to fight as well as carry merchandise, and who readily joined in warlike expeditions in which there was a chance of booty.

The history of English naval conflicts in the sixteenth and seventeenth centuries, certainly proves that the idea of naval volunteers is not a modern one. The most distinguished Bristolian in this direction was John Hopkins, who was Mayor of Bristol three years before the death of Queen Elizabeth. Of this worthy it is recorded that he "sett forth a ship, and in person went captain to Cales action; at whose returne he was with much joy mett by the citizens on Durdham Down." Evans adds that the expedition in which the mayor took part was that against Cadiz in 1595, under the Earl of Essex and Admiral Howard, in which one
thousand of the nobility and gentry served as soldiers. The
eexample of this courageous mayor appears to have made itself
felt generally in the city, and there are many proofs that
Bristol men took a prominent part in the contests on the sea
which were so common in the sixteenth and seventeenth
centuries. This local spirit is illustrated in the following fine
old ballad—an admirable specimen of the later school of ballad
writing—which refers to an event that occurred in the war
with Spain from 1625 to 1630, during which time many
private fighting ships were sent out from Bristol. The
quaintness of the ballad entitles it to a place here:—

**THE HONOR OF BRISTOL.**

"Showing how the 'Angel Gabriel,' of Bristol, fought with
three ships, who boarded us many times, wherein we cleared
our decks and killed five hundred of their men, and made
them fly into Cales, where we lost but three men, to the
honor of the 'Angel Gabriel,' of Bristol."

Attend you, and give ear awhile, and you shall understand
Of a battle fought upon the seas, by a ship of brave command:
The fight it was so famous that all men's hearts did fill,
And make them cry "To sea with the Angel Gabriel."

The lusty ship of Bristol sailed out adventurously
Against the foes of England their strength with them to try;
Well victual'd, rig'd, and man'd, and good provision still,
Which made them cry "To sea with the Angel Gabriel."

The captain, famous Netheway, so was he called by name,
The master's name John Mines, a man of noted fame;
The gunner, Thomas Watson, a man of perfect skill
With other valiant hearts, in the Angel Gabriel.
They waving up and down the seas upon the ocean main:
It is not long ago, quoth they, since England fought with Spain;
Would we with them might meet, our minds for to fulfil,
We would play a noble bout with our Angel Gabriel.

They had no sooner spoken, then straight appeared in sight
Three lusty Spanish vessels, of warlike force and might;
With bloody resolution they thought our men to spill,
And vowed to make a prize of our Angel Gabriel.

Then first came up their Admiral themselves for to advance—
In her she bore full forty-eight pieces of ordnance;
The next that then came near us was their Vice-Admiral,
Which shot most furiously at our Angel Gabriel.

Our gallant ship had in her full forty fighting men,
With twenty pieces of ordnance we played about them then;
And with powder, shot, and bullets, we did imploy them still,
And thus began the fight with our Angel Gabriel.

Our captain to our master said, take courage master bold;
The master to the seamen said, stand fast my hearts of gold;
The gunner unto all the rest, brave hearts be valiant still,
Let us fight in the defence of our Angel Gabriel.

Then we gave them a broadside which shot their mast asunder,
And tore the boat-sprit of their ship, which made the Spaniards wonder;
Which caused them to cry, with voices loud and shrill,
Help, help, or else we sink, by the Angel Gabriel.

Yet desperately they boarded us, for all our valiant shot,
Threescore of their best fighting men upon our decks was got;
And then at their first entrance full thirty did we kill,
And thus we cleared our decks of the Angel Gabriel.

With that their three ships boarded us again with might and main,
But still our noble Englishmen cried out "A fig for Spain;"
Though seven times they boarded us, at last we showed our skill,
And made them feel the force of our Angel Gabriel.
Seven hours this fight continued, and many brave men lay dead,
With purple gore and Spanish blood the sea was coloured red,
Five hundred of their men we there outright did kill,
And many more were maim'd, by the Angel Gabriel.

They seeing of these bloody spoils, the rest made haste away,
For why—they saw it was no boot any longer for to stay,
When they fled into Cales, and there they must lye still,
For they never more will dare to meet our Angel Gabriel.

We had within our English ship but only three men slain,
And five men hurt, the which I hope will soon be well again;
At Bristol we were landed, and let us praise God still,
That thus hath blessed our men, and our Angel Gabriel.

Now let us not forget to speak of the gift given by the owner
Of the Angel Gabriel, that many years have known her,
Two hundred pounds in coin and plate he gave with free good will
Unto them that bravely fought in the Angel Gabriel.

When Seyer was writing his history, this ballad, in black letter, was in possession of B. H. Bright, Esq.

At a later age Bristol privateers grew so greatly in number that in 1742 it is said they exceeded in tonnage, number of guns, and men, the whole Royal Navy of Great Britain in the reign of Queen Elizabeth. Readers of Sir Walter Scott's "Pirate" will recollect Clement Cleveland, captain of the Good hope, of Bristol, who tells Mordaunt of his luck with privateering and commerce on the Spanish main, and adds that his father was well known on the Bristol "Tolsell"—the old Tolsey where Bristol merchants most did congregate.
BRISTOL AND THE NAVY.

We have already seen how Bristol ships swelled the Royal Navies of Edward the Third and Henry the Fifth, and it would seem that for many generations the port contained ships suitable for warlike operations at sea. In 1442, when it was necessary to send a naval force to Normandy, the House of Commons suggested the places from which eight ships could be supplied. Bristol was required to furnish two—the Nicholas of the Tower and the Katherine Burton; and it is alleged by some historians that the former was the ship that captured the Duke of Suffolk, whose execution took place in an open boat. On this point, however, as on many others of local history, the compilers of events have different theories.

At the siege of Boulogne, in 1545, twelve ships sailed out of Bristol under the command of the Earl of Lenox. “When Henry came on board Bristowe’s Fleet he asked the names of their ships, and they answered, the barque Thorne, of 600 tons; Pratt, 600 tons; Gourney, 400 tons; Younge, 400 tons; Winter, 300 tons; Shipman, 250 tons; Elephant, 120 tons; Dragon, 120 tons.” This goodly array drew from the English monarch the celebrated rejoinder already quoted, that “he wished he had more such Thornes, Pratts, and Gourneys in his land.”

Bristol’s next important connection with the navy, just a century later, was also indicative of loyalty, but a loyalty that did not prove so successful. Soon after the commencement of the great civil war, there is the record of a ship from Bristol, bound for Chester with arms and ammunition for the relief of the King’s forces there, being carried by a mutinous crew into Liverpool, and in 1645 we find the city having an unpleasant visit from the “Parliament ships,” that arrived in
Kingroad to blockade the city. They were sent by Vice-Admiral Moulton, then at Milford Haven; but, apparently the naval part of the siege did not assume a very active character. The seamen are said to have assisted in the general attacks upon the forts.

Eight years later when England was under the Commonwealth, Bristol, that had often taken care of gold received from captured enemies, had now to take care of captured enemies themselves; for after Blake's victory over Van Tromp's Dutch fleet, fifty of the prisoners were brought to Bristol, and of all places in the city were lodged in the crypt of Redcliff Church. "The 30th of December there was paid by order of the mayor and aldermen, for 30 large bed mats and 20 more for the Dutch prisoners under Redcliff Church, at 1s. 4d. per mat, £3 6s. 8d.; the prisoners were removed hence at the close of 1655, bound together with cords, and conveyed in troops to Chepstow Castle."

Mr. Taylor tells us that the sexton was paid 5s. for cleansing the vault after their departure, and laconically adds "that no doubt the money was earned."

One of the most striking points in the local history of the seventeenth century is the frequent recurrence of announcements of ship launches, and, in addition to the numbers of ships launched here designed for the mercantile marine, the port was evidently noted for the construction of ships of war. In January, 1627, the ship Charles, of 300 tons and 30 guns, was launched here; in 1665, a frigate called the Islip, of 30 guns; the next year a frigate called the Nantwich, of 44 guns; in 1666, the St. Patrick, frigate, of 52 guns; in 1668, (the year, by-the-bye, in which William Penn commenced preaching the doctrines of the peaceful Quakers) the Edgar, frigate, of 72
BRISTOL AND THE NAVY.

guns, was launched here: its burthen was 1,046 tons, and it was designed to carry 432 men; its builder was Mr. Bailey, who also constructed the Nantwich, and was the leading Bristol ship builder of his time. The Edgar was apparently the largest ship of war built in the port, with the exception of the Northumberland, of 1,096 tons burthen, and designed to carry 70 guns and 446 men. This was in 1679. Another ship of war launched in Bristol about this time was the Oxford, of 54 guns and 683 tons, for 274 men. After this there is a long break in the announcement of the launching in Bristol of war ships, but more than a hundred years after, in 1778, the Gloucester, of 896 tons, for 60 guns and 316 men, was built here, and the Medea, 32 guns. The Saucy Arethusa, celebrated by Dibdin in song and by Captain Channer in romance, was also built in Bristol.

The St. Patrick, mentioned in the foregoing list, had a brief career, but one full of sharp, active service, and to fill its complement of men had 300 able seamen pressed for service from a fleet of Virginian ships that had arrived in Bristol for St. James’s Fair with cargoes of tobacco, sugar, indigo, and cotton. The press-gang was often employed in these days, and there are other records of men being taken from the Bristol Quay to serve the King against the enemy of the country at the time—sometimes France, at other times Spain, and at others Holland. The men were, perhaps, used to it; at any rate, if the local chronicles are to be believed, the St. Patrick (which had been launched, by-the-bye, with great pomp and circumstance in the presence of the mayor and aldermen) sailed in July, 1666, “full of men and courage.” Mr. Taylor in his contribution to Wright’s useful book “Bristol and its Environs,” says, “She proved an excellent sailor, and was
further reported to have met six or seven French privateers, to have sunk three and taken the rest. On February 5th of the following year she was herself captured near the North Foreland by two Dutch men-of-war: her captain was killed, and most of the men desperately wounded. Samuel Pepys gives some account in his diary of her loss, and says it was owing to her boldness in chasing two ships, the want of powder, and the desertion of her own fire-ship.”

This brief summary of Bristol’s connection with the navy could not close with a more honourable record of Bristol pluck.

**EDWARD COLSTON.**

No name in the long list of traders whose personal success was identified with the commerce of the port, is held in greater honour than that of Edward Colston, the West India merchant, who is described as a son of Bristol, who drove a better bargain and gave away more money than any local philanthropist before or since. In his connection with the shipping, he imported sugar and other produce from the West Indies, becoming, in the language of the time, a “Meire” merchant, from the ancient name of the West Indian island of St. Kits, with which, in the fifteenth century, an extensive business was carried on in sugar and slaves. He appears to have carried on an unusually large trade with a success like that of the Cunards of modern times, having lost, by some authorities, not a single ship, and, according to the general belief, only one at any rate out of the fleet which had brought him in his immense profits, and enabled him to be so unsparing in his charities.

The “dolphin embossed,” which has been worn by the
Colston boys since 1776, is said to celebrate the providential escape of one of Colston's ships from wreck by the forcing of a dolphin into a leak which (so the story runs) would have sunk a bigger ship than the eminent philanthropist's.

Colston, though he was a member of parliament for Bristol from 1710 to 1713, appears to have spent his time chiefly on the Quay-side or at the home of the destitute. His private life, apart from his association with the port, may be read with interest and advantage. His stately vessels yielded freely to him the fruits of commerce zealously pursued, and his generosity was as great as his profits were plentiful. Distress, in its multifarious forms, received abundant help from a purse which seemed practically inexhaustible, his charities, as far as they are known, having amounted to £100,000, of which he distributed £20,000 to the London poor in one year (1709), a year of famine.

These charities were not always appreciated, and even Colston's contemporaries among the Bristol aldermen condemned the pauperising influence of his Hospital, styling it a "nursery for beggars and sloths, and rather a burden than a benefit to the place." But the philanthropist's large-heartedness, the poverty of the times in which he lived, and the purity of the motives which prompted him to devote to the suffering what he had accumulated in the keen competition of the world's market, have preserved his name from the mediocrity which is the proper portion of an indiscriminate charity that has too often sought fame in the building of churches. For this reason the memory of the bachelor merchant, who in 1721 saw his eighty-fifth birthday, is preserved in the annual November festivals, and in any history of
the port of Bristol the name of Colston must ever stand side by side with that of Canynge as a merchant prince who combined a vigorous capacity in the shipping trade with a genuine desire to devote to the best interests of his country the wealth thus obtained. Bigoted he may have been, but time softens the harsher features of character, and all classes speak respectfully of the memory of the man who did more perhaps for Bristol by his energetic use of the port for the purposes of his trade than by the exceptional benevolence which is inseparably associated with his name.

A FEW UNCONNECTED LINKS.

Before leaving entirely those generations that we regard as remote, it may not be uninteresting to gather together a few stray incidents connected with the port, that find no fitting place in the divisions of the subject already treated.

Allusion has been incidentally made to the Bristol St. James’s Fair, and it is worthy of remark that this long-established gathering was at one time considered to be almost the principal fair in the country. Merchandise from all parts of the known world was brought hither in the early part of the seventeenth century, and in those troublous times it was customary if possible for the merchants to procure the services of armed frigates as convoys to their fleet. The necessity was caused by the daring of Turkish cruisers, and as many as eleven sail of these with English colours were reported at one time being on the sea, with the intention of seizing passengers to Bristol. On the 4th July, 1636, the Mayor of Penzance complained to the Secretary of State, that his Majesty’s fleet had not been seen off the coast of Cornwall for fourteen days, although the Turkish corsairs intended to be about the Lizard and the
Land's End against St. James's fair. In the same year, James Williams, Mayor of Newport, (Monmouth) petitioned not to be pressed for £29 9s. 9d. ship money for three weeks, St. James's fair having hindered him.

Apropos of privateering, in which the terrible Turk was not unrivalled, it may be mentioned that although some Bristol enterprise in that way is reported to have been a failure, Bristolians had occasionally the pleasure of seeing the success of their fellow countrymen. Two or three valuable prizes were brought into the port in 1745, and the most important was so valuable as certainly to arouse the cupidity of adventurous spirits. In July of that year two London privateers came into port with money and other valuables taken in two Spanish ships, viz., "1,093 chests weighing 1,573 cwt. 29 lbs. nett weight, (2,644,922 ozs.,) besides five chests of wrought plate, several tons of cocoa, a gold church in miniature, and other valuables." The value of merely the first part mentioned of the booty is estimated at £727,372 16s. sterling, and the Bristol citizens had the doubtful privilege of seeing the plunder carried away to London in twenty-two waggons. In October of the same year the "Trial" privateer and her prize destined for Scotland with arms and £6,000 (it will be remembered that this was the year of the rebellion in favour of the Young Pretender,) was brought into Kingroad.

Kingroad has indeed witnessed some exciting scenes. In 1587 we find twelve Bristol men were vigorously defending the policy of protection, and upholding the rights of Bristol merchants against one Edward Whitson. His offence was the intended exportation to France of a parcel of calf-skins, and thereby infringing a patented monopoly of that merchandise. Under Thomas James, who was subsequently member
of Parliament for Bristol, the defenders of Bristol trade sailed down to Kingroad armed with "a musket and half-pikes," and the enemy fought with bows and arrows. The contest was stopped by the civil authority of the sheriff, but not before a man was killed.

About this time Kingroad and its vicinity obtained an unfortunate reputation for wrecks. In 1575, "a ship richly laden was lost in Kingroad, the goods of Thomas Williams, merchant," and three years later a ship called the Golden Lion, of 540 tons, laden with 200 tons of salt and 60 tons of sack, not being well moored, drove upon the rocks at Hungroad, and upon the tide leaving her she fell over. Efforts to get her up were unsuccessful, and she was eventually broken in pieces. Three years later again, a ship called the Dominick, "laden with spices and oils," was wrecked of Portishead Point and 27 lives were lost. In connection with losses at sea, it is recorded that in the year 1555 the merchants of Bristol, in a great conflict on the sea, lost ships and goods to the value of £40,000, or thereabouts. It was probably these "losses at sea from the enemy" that induced Queen Elizabeth in the first year of her reign to make the special exemption of the Bristol merchants from dues already mentioned.

Early in the 17th century a curious scene happened in Bristol river, that shows that even the pastimes of the citizens at that time had a reference to naval matters. The occasion was upon the visit of the Queen (Anne of Denmark) to Bristol, in June, 1613. Her Majesty appears to have been received with great state and ceremony, and we are told that the Recorder, who met her at Lawford’s Gate, "made a very learned oration to her Majesty." On Sunday, the 6th of June, the Queen paid a state visit to the Cathedral, but it is with
the proceedings of the morrow, that took place in the presence of 30,000 people, that we have now to deal, as showing the kind of dish the local authorities thought fit "to set before the Queen."—

"To show her Grace some recreation that might delight her, the next day there was a fight made upon the water, at the Gibb, and there was built a place in Canon's Marsh, finely decked with ivy leaves and flowers, for her Grace to sit and see the fight. And when the time came, the Mayor and Aldermen, in their black gowns, brought her Grace thither, they riding before her in their foot-cloaths; and so, having placed her Grace, up came an English ship under sail and cast anchor, who, striking topmasts, and lowering ancients and flags, made obeisance to the Queen. Having hoisted flags, &c., again, up came two galleys of Turks, who set upon the ship—where was much fighting and shooting on both sides—the Turks boarding the ship, and putting off again with loss of men. Some of the Turks, running up the shrouds to the maintop to pull down the flag, were cast overboard into the river, and the ship's side ran over with blood. At last the Turks were taken, and presented to her Majesty, who, laughing, said they looked liked Turks indeed, not only by their apparel, but by their countenances. This fight was excellently performed, and so delighted her Majesty, that she said she never saw anything so neatly and artificially performed in her life. And then she was re-conducted to her lodging by the Mayor and Aldermen, with a band of soldiers. 'In the evening, the Lady Drumman, belonging to her Majesty's suite, presented the Maire with a faire ring of gould, set with diamonds, as a favour from the Queene.'"

In a marginal note to a "Poem" descriptive of the Royal visit, and written by one "Robert Naile, a prentice in Bristol," it is stated that the appearance of blood that so delighted the Queen, was produced by six bladders of blood being poured out of the scubber-holes. Well, chaceon a son goût, and this sort of entertainment evidently met with warm approval on the part of the illustrious visitor, so much so that when she
bade the Mayor adieu she thanked him and the whole city for their love, saying, that she "never knew she was a Queen till she came to Bristol." and one enthusiastic chronicler affirms that she departed "with tears in her eyes."

Our busy merchant forerunners seem to have occasionally fallen foul of the city authorities as to the dues claimed. In the early part of the sixteenth century, Mr. Anthony Bridgegood having ventured in business as far as the importation of a cargo of "canvas and lokerams," felt aggrieved that Mr. Robert Elliot, the sheriff, should distress four packs, and compel him to pay 8d. for keyage. Mr. Elliot could only plead "immemorial custom," affirming that for the repair of the common key upon the back of the River Avon, the Mayor, Sheriff, Bailiffs, and Commonalty had usually levied, and had of all merchants, as well denizens as foreigners, for all merchandise landed, "a certain custom called keyage, according to the rate of 12d. for every dolli weight, and distrained for the same till they have satisfied for the said keyage." And he further strengthened his case by proving that a gentleman, who is handed down to posterity as Maurice Bowcher, had been perfectly content to pay his eightpence and save his packs of lokerams. As a consequence, Mr. Bridgegood lost not only his eightpence but his action into the bargain—a precedent which was adopted in 1786, when the dues were again litigated as oppressive to trade; and "after great expence of a trial at Gloucester, the merchants were cast, and the sheriff's dues confirmed."

A much more serious dispute was commenced in Bristol at about 1636, for the city was particularly annoyed by the imposition of ship-money by Charles the First—the beginning of the great civil war. Most local historians have quoted from Adams's calendar:—
“Our marchants of Bristoll (says the writer) were much troubled this year (1637-8) and the year before by pursuivants, and many were served to appear in London, where by oaths they were severally examined and constrained to swear what commodities they had sent to sea, and what commodities they had received home from foreign countries in many years before in sundry ships, according to notes of information, which the Commissioners had procured and collected of their entries in the Custom-house books; and likewise, what they did know of others, their friends and partners, that had not made true entries; whereby some were constrained, for discharge of their consciences, to accuse one another. These examinations and answers were recorded; and many of our merchants after their coming home were served up again and new examined. From September to the month of December, 1637, our city was never free from commissions, commissioners, and pursuivants of sundry sorts, which lay in several parts of our city, to make enquiry not only against marchants, but against other tradesmen who were examined and sent up to London, and great impositions laid upon them to the grief of many; insomuch that all shopkeepers stood in great fear of them especially sopemakers, who were constrained to pay £4 custom for every ton of sope they made, and every man rated what quantity he should yearly make; and account of every man’s doings was weekly taken by some appointed for oversight thereof. Some were known to make more than they were allowed or paid for, whereupon about 30 of them were served up to London, where against their wills they were retained long with great expences, imprisoned, and fined in above £20,000, and were bound to more inconveniences before they could be discharged.”

It was such occurrences as these that predisposed so many of the citizens to take the Parliamentary side when the war broke out.

It may not be generally known that amongst the Corporation plate is a “richly-chased silver monteith and collar,” which bears an inscription revealing a characteristic episode of one period of Bristol history: “The Society of Merchant Venturers of the city of Bristol, their gift to Captain Samuel
Pitts, for bravely defending his ship—Kirklington Galley—the 7th of June, 1628, against a Spanish rover, in his passage from Jamaica to Bristol."

Interesting in another direction is the result of the expedition in the "Duke," privateer of Dr. Dover, whose chief local connection was that he was the first medical man who offered gratuitous services on behalf of the poor under the care of the Bristol guardians. When, some years later, he went to sea, he had the good fortune to bring home Alexander Selkirk, the original of Robinson Crusoe.

THE PORT A HUNDRED YEARS AGO.

A prominent feature in the history of the port in the eighteenth century is one that is by no means to the credit of the city. It is recorded by local historians, that as far back as the visit of Judge Jefferies, the Bristol mayor and aldermen were accused of transporting convicted criminals to their American plantations, and selling them by way of trade, and less than a hundred years ago it was in Bristol that Clarkson began his enquiries for evidence against the traffic in negroes, and in his account of his labours he speaks of his great anxiety, when he first came to Bristol, caused by the magnitude of the task he had undertaken of attempting to subvert one of the branches of the city's commerce.

Horrible details are still on record of the brutalities of the Bristol slave trade, but yet so tenacious and so influential were the dealers in human beings, that the bells of the city churches were rung merrily upon the rejection of Wilberforce's anti-slavery bill.

Turning, however, to the more agreeable contemplation of the general state of the port, we find that historians were
enthusiastic in describing the city as second to none but London, a position which the city, though it has doubled its population since that time, cannot be said to occupy now. And the historical mind of the time loved to rest on the maritime associations of Bristol. Busching (1762,) writing in High Dutch, says:—"It is by far the largest city in Britain next to London, containing about thirteen thousand houses, and above 100,000 inhabitants. It is said by some to use two thousand maritime vessels, coasters, as well as ships employed in foreign voyages, and it has many important manufactories. It has a most extensive quay, with dockyards, etc., for shipbuilding; for its vast commerce, wealth, and shipping it is outdone by few trading cities in Europe." This enthusiastic (and somewhat exaggerated) description by a stranger was but confirmatory of that given by a distinguished English visitor some thirty years before. No less important a personage than Alexander Pope wrote concerning Bristol, "From thence (Bristol Bridge) you come to a key along the old wall with houses on both sides, and in the middle of the street, as far as you can see, hundreds of ships, their masts as thick as they can stand by one another, which is the oddest and most surprising thing imaginable. This street is fuller of them than the Thames from London Bridge to Deptford, and at certain times only the water rises to carry them out; so that at other times a long street full of ships in the middle, and houses on both sides, look like a dream.

The difficulty of bringing large ships up the tortuous Avon to the heart of the city, extracted from Dr. Campbell a special reference to "even ships of great burden" coming up, and he agrees with other writers that, in the matter of
foreign commerce, Bristol was next to London. He even gives the palm to Bristol over the capital when he says, "if the value of that commerce be compared with the size of the respective cities, Bristol has the start." In the latter part of the eighteenth century the trade was active to the West Indies and North America, 70 large ships having been employed in the West India trade in sugar, rum, mahogany, and other things. The Guinea trade was also "very flourishing," and in the Mediterranean, to Norway, Hamburg, and up the Baltic, was also greatly improved and extended. The ships were employed to export manufactured goods to Florida, Carolina, Maryland, New York, Philadelphia, Newfoundland, and Quebec, returning with tobacco, rice, tar, deer-skins, timber, fur, indigo, logwood, &c. "And they have all the heavy goods by water from Birmingham and the North of England by trows, not less than 100 being employed in bringing goods to and from Bristol on the Severn." "The trade to Africa for ivory, gold dust, &c., has been cultivated here with great spirit and success." "They not long since sent ships to Greenland in the whale fishery, which, proving more uncertain and not so advantageous, is dropped for the present." Having just mentioned the West India trade in sugar we may add, parenthetically, that as late as 1811 there were 16 sugar refineries in Bristol.

In 1769 a gentleman buoyantly writes as follows:—"And as it now continues the quay wall quite round the Back, it completes that work, and together forms as fine a quay of a mile and a quarter round as any in England, encircling in a manner that side of the city. And the ships, like a thick forest of tall trees, after sailing "up with the tide into the midst of the city, lie securely on a soft bed of mud on the
return of the tide by the quay walls, and are there discharged; the goods and merchandise weighed off at the king’s scales, and immediately deposited in warehouses at the merchants’ back doors, constructed there very conveniently for that purpose.” And in 1789 we even get as far as the following:—

Vela hinc dant ventis rostratæ turgida puppes
Huc iterum plausu cassis onusta redit;
Huc oriens merces, merces occasus et omnis
Per mare, per terras advehit, orbis opes;
Unde fit emporium, cui qui commercia callent
Empturi properant undique turba virum;
In patrias suas redientes, omnibus urbis
Fæstantis narrant haud mediocre decus.

And the writer closes with the culmination:—

Jura, Deum, regem regionem, crimina, pacem
Servat, adorat, amat, protegit, odit, habet.

Opinion at that time was gradually beginning to recognise the necessity of some kind of floating harbour, and several minor improvements, crowned with the building of a new mud dock on the Grove, at an expense “to the Merchants” of £10,000, are a proof of this tendency. Smeaton’s plan in 1765 for a harbour was followed by Champion’s in 1767. Smeaton proposed that the Froom should be dammed up at the lower end of the Quay, and diverted into a new canal and discharged at the glass house, the lower end of Canon’s Marsh, but the expense of doing this was too great; the total estimate being £25,000. Champion’s plan was to dam up the river above the glass-house, but, says Barrett, it being thought still more expensive to execute than the other, the whole was dropt,” and the sanguine historian discloses the prevailing feeling in the brief
comment: "But this scheme, it is thought, will yet be put in execution at some future time, so desirous are they still of keeping the ships always afloat." Enterprise had even gone so far in the earlier part of the century as to make a dock at Sea Mills (the alleged Roman origin of which is an amusing popular myth), but the unloading into lighters of such vessels as could round the Horse Shoe Point was of no practical value, and in 1788 Barrett reports on its abandonment.

The port, however, was making rapid progress; shipbuilding was carried on with great spirit and industry, and shortly after the passing of the century, the plans were projected and carried out which gave to Bristol the long-coveted floating accommodation.

THE NEW CUT AND FLOATING HARBOUR.

The New Cut, from Rownham to Totterdown, gave, at one stroke, two miles and a half of floating harbour to the city. It was a bold engineering effort that required upwards of £600,000 for its completion; but the securing of eighty-two acres of dock accommodation was worth all the energy which was devoted to the work. In 1803 a recently-formed company that had taken the title of the Bristol Dock Company, obtained an Act authorising this great work, and upon the 1st of May, 1804, operations were commenced. "The ground having been previously marked out," says a newspaper of the period, "the cut for the new course of the Avon was begun near Mr. Teast's Dock, at five o'clock in the morning, in the presence of the directors, the inspectors, and many of the members of the Dock Company. At the late visit of the British Association it was pointed out with amusement that
when the Association first came to Bristol, one of the events of the week was the commencement of the works of the Suspension Bridge, on the Somersetshire side, at the pleasing hour of seven in the morning, but the idea of a public ceremony at five is really overwhelming. People must have stayed up very late in those times not to have gone to bed until after five.

The local chronicler, however, does not appear to have thought the time remarkable, for he goes on calmly to remark that “the soil was first broken and the first barrow filled by George Webb Hall, Esq.,” and adds that “a numerous body of men are now proceeding with the greatest expedition.” The secretaries for the Dock Company were Messrs. G. W. Hall, and John Osborne, and these gentlemen, who publicly gave notice in May, 1804, of the commencement of the works, also signed a declaration on the 1st of May, 1809, that the works had been duly finished according to the authority of the Dock Act, 1803. We are told that “after numerous unforeseen difficulties both local and accidental—after encountering opposition of considerable magnitude among many of their fellow-citizens possessed of wealth and respectability—and having perhaps undertaken to perform in a given time more than it appears almost possible in the capacity of humanity to execute—the Directors of the concern have performed their undertaking.”

It may be mentioned as a curious illustration of the trade of the time, that the same paper containing this magniloquent announcement, informs the public that “since Saturday last no fewer than eight American vessels have arrived at our ports, principally freighted with grain.”

In excavating the Cut some oak trees were found at a depth of 30 feet below the surface; and one of the passengers who
was on board the Juno at the opening of Avonmouth Dock, has still in his possession a nut which he took from a hole in one of those old oaks.

A rather curious circumstance occurred soon after the completion of the docks. The labourers employed on the works were treated by the directors to a dinner, and accordingly a thousand men dined in a field between the floating Dock and the New Cut—opposite Mardyke—"amidst a vast concourse of spectators." Referring to the previously quoted journal, we find that even then the phrase "good old English" was in vogue, and it was used to describe the character of the fare provided for the workmen, the journalist's ideal apparently being "two whole oxen, six cwt. of plum pudding, a thousand gallons of stingo, and other things in proportion". Unfortunately the after-dinner proceedings were of rather too-striking a character. The stingo, or the other things in proportion, had taken effect, and when a cart came laden with a fresh supply of ale "some honest Hibernians unceremoniously disburthened the vehicle of its contents." The English section of the community strongly objected to these proceedings—doubtless from a laudable desire to preserve the sobriety of their Irish friends, who mindful of the glories of Donnybrook retired to Marsh Street, re-issuing thence a hundred strong carryin sprigs of shillelagh. At the bottom of Prince Street they met the Englishmen, who were coming to inquire after their health. Their meeting was of so interesting a nature that they "could only be separated by the interference of the police and the press-gang, who took one part of the combatants to the Bridewell and the other to the house of rendezvous. "Some persons were seriously hurt in the fray, but none were killed." Meanwhile who had the beer?
It should be remembered that in addition to the making of the whole extent of the Cut, and the dockising of the present Floating Harbour—Bathurst Basin, by which vessels of lighter burden were enabled to penetrate nearer the heart of the city, was also made, the cost of it being £50,000. By this truly gigantic undertaking, improvements were rendered possible to the trade of Bristol, which have not yet been fully carried out, and it is only since 1848 that Bristol has begun to reap the benefits of the policy which, at the beginning of the century characterised the proceedings of the Bristol Dock Company, and led them to construct a floating harbour.

BRISTOL AND THE FIRST ATLANTIC STEAMER.

The part Bristol played in the development of ocean steam traffic, when the movement was in its infancy, can never be considered without mingled feelings of pride and regret. The successful trip of the Great Western placed an immense power within the reach of the Bristol merchants who built her—the power to make Bristol what Liverpool has since become, the central port for ocean-going steamers—but the opportunity was lost. The mistake did not arise from want of will, but from too great a desire for experiment. The expenditure of £97,000 on the Great Britain, after the £63,000 paid to Mr. William Patterson for the building of the Great Western, was sufficient proof that the feat of 1838 was appreciated by the Bristol company, and that they were still further ahead of the times—too far, indeed, for the practical working of the scheme; and the effect of this error, in permitting the Cunard boats to establish the mail service between Liverpool and America by means of four Clyde-built steamers, and driving
away the Great Western through the excessive dock dues and inefficient accommodation, was to crush what would have been a splendid success for Bristol.

Historically, the first voyage of the Great Western is of unusual interest. Her launch on July 19th, 1837, must have been a work of no little difficulty, seeing that she was 1,340 tons register, builders' measurement, with engines 440 horse power; and the shortness of her outward and homeward trips, equalling the time of some of the ocean-going steamers of most recent date, undoubtedly had a startling effect upon the commercial and scientific world of that day. Having seven passengers on board, she started on April 8th, 1838, astonished a liner "seven days from Liverpool," by passing her on the third day from leaving Bristol, and berthed at New York after a voyage of 15 days and 10 hours, the return voyage (with sixty-six passengers,) taking only 14 days, from May 7th to 22nd in the same year. Instead of the 1,480 tons of coal which was asserted the vessel would have to carry, she took out less than half that quantity, and only 450 tons were actually consumed.

At New York, so great was the importance of the event, 100,000 people were present at her departure for England, and an immense multitude awaited her arrival at Kingroad. One of the passengers on landing presented a bouquet of American flowers to the lady of Captain Claxton, the manager of the Great Western Navigation Company. They appeared "as fresh as if the dew had been still on them." At a dinner of the Bristol citizens, two days afterwards, specimens of flax and cotton yarn were exhibited, the raw material of which had been shipped 18 days previously, and manufactured in a recently-established mill in Bristol. That the Great Western
was a well-built ship is apparent from the seventy passages made from April, 1838, to November, 1844, during which time she ran 256,000 miles, at an average speed of more than ten miles an hour, and conveyed 5,774 passengers. It is to the removal of the Great Western from Bristol that the Chamber of Commerce in 1846, attributed the falling off in the exports, in which, from the year 1839, there was a diminution from £339,728, to £150,883.

There is a very general and mistaken impression that the Great Western was the first steamboat to cross the Atlantic. Nineteen years before the Great Western left Bristol, the American steamboat "Savannah" steamed and sailed from New York to Liverpool in 31 days; and the voyages of the Curacao, the Royal William, and the Sirius also claim precedence. But the rapid passage of the Great Western was, without doubt, the first satisfactory answer to the "impracticability" theories of the scientists. The credit of proving that steam could be successfully applied to the requirements of commerce in trans-Atlantic voyages indisputably belongs only to the Bristol ship, which was unquestionably the first steamer built for the Atlantic trade; and it is therefore, the more to be regretted that the merchants did not follow up the advantage they thus obtained. It is interesting to note that the Great Britain, which was begun in 1839, and finished in 1843, was launched in the presence of Prince Albert. She was propelled without side paddles, and built with a view to speed. In her first trip to London (1845) she beat the fastest steamer that could be found to race with her.

After the removal of these steamboats from Bristol no effort was made towards the development of an Atlantic steam trade till 1871. On July 2nd of that year the Great
Western Steamship Company sent out the Arragon, which though her cost amounted to only half that of the Great Western, was of nearly the same dimensions, being 245 feet long and registered tonnage 1,317. She took with her 44 passengers, her freight being 1,000 tons, and 10,000 persons were present to witness this renewal of trans-Atlantic steam voyages from Bristol. Since then Messrs. Whitwill & Co., have added three or four other large and powerful steam vessels to the American trade, all of which are at the present time employed in connection with that important branch of commerce.

MR. SCOTT RUSSELL ON THE GREAT WESTERN AND GREAT BRITAIN.

In the year 1836 the British Association held a meeting in Bristol, and as the inhabitants were then contemplating the building of the Great Western, the subject was discussed in the mechanical section, presided over by the elder Brunel. We need not again quote the memorable language of Dr. Lardner, who regarded an Atlantic voyage under steam as "no more practicable than a voyage to the moon." Two encouraging voices were heard on that occasion:

"Mr. I. K. Brunel was convinced that ten miles an hour might be accomplished by steamships in which the best arrangements known were adopted.

"Mr. Scott Russell wished to say only one word. Let them try the experiment of trans-Atlantic steam navigation, with a view only to the success of the enterprise itself, but on no account to try any new boilers or experiments, but to have the best combination of the plans already in use."
Many years after this, namely, in 1863, Mr. Scott Russell referred again to the subject, and told us why Bristol failed after making such a magnificent start. His language was full of interest. He said:—

The History of the Great Western is, to my mind, the history of one of the most prudent and well-conducted enterprises in the history of great ships. In 1835 the inhabitants of Bristol undertook the construction of that vessel. It was determined by the Great Western Steamship Company that for the purpose of carrying cargo as well as passengers, the most speedy and certain passage, the greatest economy of power, and the full assurance of a profitable return, they would require a vessel of the very large size of 1,200 tons; and it was hoped that with 400 horse-power such a vessel would make the passage out in less than 20 days, and return in 13, whereas in sailing packets the time occupied was 36 and 24 days.

The Great Western was well designed, well executed, and well-managed, was most creditable to Bristol, and yet failed to secure the permanence of the American trade which they had wanted. What were the causes of this failure?—for unquestionably the success of the Great Western was the foundation upon which plans were formed to rob Bristol of the fruits of its labour.

The mistake which the undertakers committed at the outset is one on which undertakings in any degree novel are more likely to be shipwrecked than any other. I strongly advise you never to begin any new line of steam navigation with a single ship. If you have not confidence in a new line, do not begin it; but if you do, let it be with two ships, otherwise you run two risks. First the risk of total failure, by some accident or mistake that has nothing to do with the undertaking. And second, that if you succeed with one ship only, it will not suffice to maintain a trade with regularity; and your rival, on seeing your success, will be able to start a rival undertaking as quickly as you can build another ship, so that he has every chance of stepping in and reaping the fruit of your labour.

The last of these consequences is exactly what followed the undertaking of the Great Western. The moment Mr. Cunard saw that she had succeeded, he rushed in and built four Great Westerns. These he
built all alike, all copies of one another, with the machinery of all identical, and the result was the triumphant success with which we are all acquainted. If he had built one vessel only his failure would have been certain.

Such was the misfortune or cause of ultimate failure of the Great Western. She was one, and she ought to have been at least two. Two Great Westerns, early and promptly put upon that line, would have made Bristol the great Transatlantic Steam Ship Harbour of England.

I now come to the second Bristol ship—the one that ought to have been the second Great Western—and in this second ship I regret to say that all the good sense and practical wisdom which had caused the success of the Great Western, seemed to have abandoned them in the undertaking of the Great Britain. What was wanted was a sister to the Great Western. What was built was as unlike her as it was possible to conceive.

Thus, then, while other people were copying the wisdom of the original Bristol shipowners, they themselves forgot all their wisdom and took to quite another course. What they did was as follows:

1. Instead of building a second Great Western, they built a single ship of a new sort, as different from her as possible, so that they had all the disadvantages of two experimental vessels instead of having a couple of one sort.

2. The second mistake was one of a still more fatal kind. They determined to make their second ship a museum of inventions. The old model and proportions of the Great Western were utterly abandoned, so that there were no two things in common between her and her companion. She was to be 300 feet instead of 120 feet long, 50 feet beam instead of 35; her tonnage 3,443 instead of 1,200; her horse power was to be raised to 1,000.

Next, in regard to shape. That was entirely revolutionised, and turned into an imitation of Sir W. Symond's new and empirical form of ship.

Next, she was to be made of iron, which was wise for a ship of that magnitude.

In regard to her novelties there was no limit, and the whole ship and her machinery was a congregation of experiments. In the middle of her progress she was altered from a paddle-wheel to a screw propeller ship;
and that experiment was not enough, for the propeller must needs be propelled by a kind of chain gearing for communicating the power of the engine to the screw.

Now the result is well known to you. Nevertheless, it is easy to see that if she had been a simple companion to the Great Western, Bristol might have retained the advantages she had achieved; instead of that, she built a ship which had to be sold as a disastrous bargain to ply in the trade of a rival port, where her ingenious engines had to be taken out, her new screw-gear got rid of, and the destiny and arrangements of the vessel so changed that she became a new ship, of slow speed and auxiliary power.

Referring to the necessity of providing docks for large steamers, Mr. Scott Russell adds:

"The large ships, in which alone long voyages can be profitably performed, must be able to find ample accommodation and provision for all their wants. Nature has given you a magnificent roadstead at the mouth of the Avon, but docks only are wanting to receive such ships at every hour and every tide when they may chance to arrive and to want accommodation. These, I believe, you yourselves are now (1866) about to provide; and whether you provide them on one side of the Avon or the other, near the mouth or higher up, you will, I have no doubt, provide them somewhere, and all I entreat you to do is to care less about where they are, than that they should be provided at once, and that they should be of such size as to afford to such vessels, as you will require for ocean steam navigation, all the accommodation which any other steam port can afford.

If you do all this you will have no cause to repent the early, long, and expensive apprenticeship which Bristol has been serving these thirty years in steam navigation, and in the owning of large ships. Bristol will find in renewed prosperity reward for a long course of quiet and prudent diligence; and if Bristol finds in her revived commerce a reward for long perseverance, under great difficulties, I shall feel no ordinary triumph in the ultimate success of principles in naval architecture and the construction of ships, which have now during thirty years been making a slow, continual, but irresistible progress."
THE FREE PORT MOVEMENT.

Allusion has been before made to the heavy dues maintained by the Bristol Dock Company as compared with those exacted in other ports, and probably no one will now deny that this policy, acted upon for a period of 40 years, during which other ports rapidly increased their business, damaged very greatly the commercial position of Bristol. One of the Mayors of Bristol indeed went so far as to say at a Council meeting that the commerce and trade of Bristol had become a bye-word and a sneer. It is quite true that during this time the population of the city increased and that the city progressed in other ways, but shipping ceased to be the distinctive feature of the city, and the better apprehension of the spirit of the age at other ports, notably Liverpool, drew away trade from Bristol, and at one time the Bristol shipping trade actually decreased.

As early as 1823 the decline of the trade occupied the serious attention of merchants and business men in the city, who organized the Bristol Chamber of Commerce, which, we are told, proceeded with great energy and thoroughness to investigate the causes leading to the decrease of the traffic to Bristol per the Avon. They found a great disparity between the rates paid at Bristol and those paid at other ports, and they did their best to induce the Dock Company to reduce the port dues. In this they only partially succeeded; and though the company did make concessions they were not sufficient by any means to allow the city to compete fairly with other ports for foreign traffic. It must also be acknowledged that the Town Council laboured hard to obtain a practicable reduction of the dues.
It was early in the present reign (1839) that the agitation for the transfer of the power and privileges of the Dock Company first assumed definite shape; and for the next four or five years spasmodic efforts at action were made, only to die out. These failures undoubtedly prepared the way for success; and, in 1845, a numerously signed memorial was presented to the Council, asking that the Corporation should resume its powers prior to 1803, of the control of the Docks.

By this time the question of the transfer was generally discussed, and in February, 1846, the Town Council were presented with a memorial signed by 1,200 of the leading business men of the city, requesting that the terms of the proposed transfer might be submitted to arbitration; and at about the same time a communication to the same purport was sent by the committee, representing these 1,200 citizens, to the directors of the Dock Company. It may be here mentioned that the Dock Company's highest dividend was 8 per cent.; of course the shareholders would not give up their share of the profits without compensation, and to a great extent the matter between the Council and the company became one of account. The delay in the transaction was severely commented upon in the city; and, in four of the wards, at least, Clifton, St. Philip's, St. James's, and the District, resolutions were passed at ward meetings, objecting to the Corporation expending any money in improvements, then contemplated, until this question was settled.

In 1846, the powerful Free Port Association was formed, in which were united eminent men of both political parties, and of which the president was Mr. Robert Bright. The agitation after this increased in importance. At a large public meeting held at the Broadmead Rooms, in November, 1846,
a memorial signed by 1,160 persons was drawn up praying the Council to take steps to obtain legislation on the subject, and another memorial to the same effect received 1,200 signatures. In that and the following year the agitation was continued by most of the trades in Bristol; by the united operatives of the city; by several public meetings; and by the Chamber of Commerce, as well as by the Free Port Association. At last early in 1848, an arrangement was come to between the Council and the company, and a bill for the transfer of the privileges of the latter was introduced into the House of Commons, the amended preamble stating that "if such Docks should become vested in the mayor, aldermen, and burgesses of Bristol, subject to proper provisions, facilities would be afforded for the improvement of the trade of the port and city of Bristol by equalising, reducing, or otherwise altering the rates now payable under recited Acts, or some of them, and which rates now levied are detrimental to such trade."

The opposition to the bill, though determined—and from the high standing of some of the objectors, influential—was by no means directed against the principle of the transfer, but was based on the ground that by the bill the ratepayers of the whole city would be taxed for the benefit of the shipowners and merchants. (It is necessary to explain that the bill provided for the redemption of the docks by the creation of a sinking fund, causing a charge upon the rates of 4d. in the £.) At one time, especially outside the Council, there was a strong feeling to this effect, and at a large public meeting at the Broadmead Rooms, convened by the mayor at the request of an influentially signed memorial, for the consideration of the bill, a motion, approving of the bill, moved by Mr Bright, and seconded by Mr Tothill, was lost, the meeting preferring an
amendment proposed by Mr. Herapath, and seconded by Mr. W. Evans, "That provided a board of dock commissioners can be formed to be wholly chosen by the ratepayers, and a reserve fund of £50,000, previously formed, be provided for accidental repairs, the proposed transfer is highly desirable, inasmuch as it will restore to Bristol the control of her own port,—the alienation of which, in its consequences, has been most injurious to her commerce, industry, and port." So it is evident that while differing as to the means, all parties agreed as to the end.

Whilst the bill was in progress, Mr. Herapath and others vigorously opposed it, on the grounds named, although the Council within a few days of the public meeting referred to, decided by a majority of 32 to 5, to uphold the bill in its original form. In consequence of the opposition, the Admiralty appointed Mr. W. Bald, C.E., of Glasgow, to make a preliminary inquiry in relation to the proposed scheme, and the inquiry was duly held at the Guildhall, when the Town Clerk (Mr. Burges) addressed the surveying officer on behalf of the promoters, and Mr. M. Brittan represented the opponents of the measure. The witnesses examined on behalf of the bill were Messrs. R. Bright, Harman Visger, R. P. King, J. Vining, and M. Whitwill.

The bill passed the third reading in the House of Commons on the 24th of May, and with a few slight amendments passed through the House of Lords by the end of July, and at the next meeting of the Council the following gentlemen were elected as the first Docks Committee:—Messrs. R. P. King, G. Thomas, Gibbs, Visger, Robinson, Jarman, Vining, G. E. Sanders, J. Miles, C. J. Thomas, J. Poole, W. Naish, and R. Phippen.
It may also be interesting to quote the names of the speakers at the congratulatory meeting of the Free Port Association held at the Guildhall in September, 1848:—Messrs. R. Bright, J. K. Haberfield, T. W. Rankin, P. F. Aiken, R. P. Clark, R. Rowe, H. O. Wills, M. Whitwill, T. P. Jose, C. Tovey, and Dr. Green. Upon this occasion Mr. Bright proposed that when the reduction of the port dues should be effected the city should observe a general holiday. Mr. Poultney promised that it should if he were Mayor, and though his term of office had expired a few days before the eventful holiday arrived, his successor, Mr. J. K. Haberfield, did all he could to carry out the wishes of the association.

Probably there are many citizens who can recall the procession of November the 15th, 1848, the day upon which the reduction of port dues took effect. The procession was formed in Old Market Street, and after it was joined in Peter Street by the Governor of the Incorporation of the Poor (Mr. J. G. Shaw) and several of the guardians, and at the Council House by the Mayor and several aldermen and councillors, it advanced in the following order:—Trades delegates; Town Clerk and other local officials, Mayor, aldermen, and Town Council; Merchant Venturers; Corporation of the Poor; Mr. Bright and members of the Free Port Association; “Merchants, bankers, and traders;” Oddfellows; shipwrights; sawyers; potters; braziers; copper-smiths; brassfounders: wire-workers; boiler makers; rope makers; twine spinners; coopers; wheelwrights; agricultural implement makers; glass blowers; glass cutters; smiths; masons; cabinet makers; floorcloth makers; the gasmen; the waterworks men; Hibernian Society; and bringing up the rear the fire brigades with their engines. The
members of Parliament for the city, Messrs. F. H. F. Berkeley and P. W. S. Miles, joined the procession near Clifton Church, and after crossing the Downs the procession returned to the Council House, where it dispersed, many of those who had joined it winding up the day at public dinners.

Throughout the whole of the city decorations were numerous, the day was observed as a holiday, and the church bells rang merrily to celebrate the inauguration of a system of such great importance to the interests of the port.

This resumption of the control of the docks was due entirely to the action of the Free Port Association—an Association which was to this city what the Anti-Corn Law League was to the country. It was well organised and spiritedly managed, and it was successful.

An association which accomplished so important a work deserves here more than a formal recognition. It had, strange to say, to encounter the opposition of three out of the four local newspapers of the day. The journal which supported the movement was under the literary control of Mr. Leonard Bruton, who, from first to last, was one of the most energetic and intelligent advocates of the movement, both in his journalistic capacity and as Secretary of the Free Port Association. The valuable services he rendered to Bristol at that great crisis have never been adequately recognised.

We have already stated that the president of the Free Port Association was Mr. Robert Bright. Mr. Bright, like Lord John Russell, was "a host in himself." He had social influence, and the confidence of all parties.

The Association was thus fortunate in its president and in its secretary; but behind these there were a strong council, and other officers.
The Association, in the absence of daily papers, enlightened the public by the issue of a series of Free Port Tracts; and in the first of these, "No. 1," issued in 1846, we find the following list of Officers of the Association, which we reproduce to show the present generation the personality of this remarkable association:


Such was the official constitution of the Free Port Association. The portrait of the president, Mr. Robert Bright, is preserved in the outer Hall of the Society of Merchant Venturers, and has the following inscription on the frame:

"Robert Bright. Presented to the Society of Merchant Venturers by the Subscribers to the Bright Testimonial Fund, 1857, in token of his efforts for securing the Freedom of the Port of Bristol."

The names of Mr. Elisha Smith Robinson and Mr. George Cole do not occur in the foregoing list of officers, but these gentlemen were consistent and powerful supporters of the Association.

The part played by the Operatives Free Port Association was very creditable to the trade organisations of the city. At the
close, when the battle was won, the expenses—a rather prosaic part of the proceedings—had to be met. The journeymen Shipwrights' Society contributed £100, and the Coopers' Society £20. There was also a spirited public subscription, and ultimately the balance against the treasurer was paid by a cheque from Mr. Robert Bright.

_Cui bono?_ the reader may ask. What beneficial results followed the success of this movement? The answer to this question was given by Mr. Leonard Bruton, in a paper which he read before the British Association, in August 1875. The prosperity of the port may be gauged by its bearing on shipping, on the value of fixed property, and on population. It is claimed as one of the results of the Free Port movement, that the local dues on vessels coming into the Port of Bristol, have been reduced more than 50 per cent., on the average, and those on goods about 20 per cent. from the year 1848.

The effect on foreign going shipping will be seen by the following figures which show the growth of the import tonnage from foreign parts during the period mentioned;—

**Twenty years of high Docks Dues.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Tonnage</th>
<th>Rise per cent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1828-37</td>
<td>667,468</td>
<td></td>
</tr>
<tr>
<td>1838-47</td>
<td>892,647</td>
<td>33.37</td>
</tr>
</tbody>
</table>

**Twenty years after reduction of Dock Dues.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Tonnage</th>
<th>Rise per cent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1848-57</td>
<td>1,487,663</td>
<td>60.65</td>
</tr>
<tr>
<td>1858-67</td>
<td>2,415,366</td>
<td>62.36</td>
</tr>
</tbody>
</table>

The actual money receipts of the Docks, have increased more than 50 per cent., notwithstanding the reduction of dues. At the same time the rateable value of property in the city, sprung up from £406,206, in 1841, to £719,988, in 1871. Thus while the foreign trade of the port has increased
fourfold, the value of property, within the period mentioned, has nearly doubled.

Then as to population. The increase between 1841 and 1851, was equal to 9 per cent.; between 1851 and 1861, the increase had risen to 12.2 per cent.; and between 1861 and 1871, the increase was 18.46 per cent. The population is consequently advancing at a regularly increasing rate.

These are facts of which all who are associated with the Free Port Association, may be proud. Had the Corporation not resumed its control of the Docks, there can be no doubt that on the old policy, the trade of the city would have been utterly ruined. The Association was of immense value, and no record of the leading events in the History of the Port of Bristol would be complete without an acknowledgment of the great services which it rendered. The Association, we should add, existed for about three years.

THE VARIOUS PLANS FOR THE IMPROVEMENT OF THE PORT.

The friends of the Free Port Movement had no reason to complain of the sequel to their successful agitation. In spite of the dues being reduced to two-thirds, the revenues in a few years' time were higher than ever previously, and had since that time gone on steadily increasing. The increase of trade thus given to the city brought the local rulers face to face with a great question of growing importance; and one result, therefore, of the opening of the port—if, indeed, that were not itself a result of a renewed spirit of enterprise—was the rapid succession of plans of improvement of the dock accommodation of the port. Some had, indeed, been put forward
before this time. About 1830, Mr. Milne, C.E., suggested the erection of a pier, 800 feet long, at Portishead, making due provision for three landing stages. Of much more importance were the suggestions made by Mr. I. K. Brunel, C.E., in a report dated the 26th December, 1839. He pointed out three modes of improving the accommodation of the port of Bristol:—

First—By constructing a lock of sufficient dimensions to admit large vessels into the Float; and with this portion of the plan was included suggestions for cutting off the most dangerous points in the river, and for generally straightening and widening the Channel.

Second—By constructing distinct docks at some distance down the river, below which point the Channel would be wider and deeper.

Third—By building a pier at Portishead, so as to render it unnecessary to take large steam vessels up the river, unless for purposes of repair.

This proposal included the making of a railway to join the Bristol and Exeter line about three miles from Bristol; and modern enterprise conformed to Brunel's suggestions nearly thirty years later.

A pier at Portishead—though apparently a railway was not included in the plan—was proposed by Mr. (afterwards Sir John) Macneil, in 1841. It will be seen that all these plans which were submitted prior to the eventful year 1848 had reference to Portishead, and no fresh ones appear to have been suggested for an interval of eleven years, when Mr. Rendel, C.E., put forward very important proposals in November, 1852, and for the first time suggested docks at the actual mouth of the Avon. In the first place the Avon was to be straightened from the
village of Pill to Dunball Island, and a pier was to be run out from the Gloucestershire shore near the Lighthouse, "commencing in a northerly direction, but bearing to the westward as it approaches the low water line, and terminating in five fathoms of water." Another pier was to be erected on the westward side, starting at Chapel Pill and running in a northeasterly direction, its head being covered by the east pier and distant from it 1,050 feet, giving to the entrance of the harbour, a west by north aspect. This eastern pier was to be 1,500 feet long, and was to terminate landward in a dock adapted "to the largest class of steamships then, or likely to be in use." It was proposed to form the dock within "The Marshes," so as to avoid the use of coffer dam, and to enter it by two locks, one of large dimensions, 670 feet long and 100 feet wide, having cills laid at such a depth that for six hours of tide there there should be at least 27 feet of water in them, and constructed at the foot of and in a line with the east pier, so as to ensure easy access for the largest class of vessels. The other lock was to be at the southern entrance to the dock, and adapted to ordinary vessels and small craft. The dock itself was to be of triangular form; (the large lock forming its apex) was to be eighty acres in area, and would contain never less than thirty feet of water.

Various supplemental works were proposed by Mr. Rendel—the erection coaling jetties, the formation of graving docks, &c.; and he also suggested that the dock should be connected with the main line of the Great Western Railway Company at Bristol. On the Somerset side of the dock it was proposed to purchase 50 acres of land, and to reclaim 125. On the Gloucestershire side 450 acres were to be bought, and 160 reclaimed. Mr. Rendel estimated the total
VARIOUS PLANS FOR IMPROVEMENT OF THE PORT. 89

cost of his scheme—that may really be called the parent of the
present Avonmouth undertaking—at one and a half millions.

Proceeding with a consideration of the various plans in
chronological order; the next to claim attention is one by
"Bristoliensis" (Mr. C. F. Thomas), who in 1853 proposed:

"First to convert Wood Hill Bay, Portishead, into an outer harbour,
protected by a breakwater of 1,200 feet in length, running out from the
'Black Nore,' and a deep water landing pier at Portishead Point 600
feet in length; he then proposed to effect the entrance to the docks by a
cutting or channel, 150 feet in width, through Portishead Hill, the
greatest depth of which is upwards of 200 feet below the highest point of
the hill; it was then proposed to form at the end of this channel a tidal
basin 350 feet wide and 2,600 feet long, to allow the ships to pass each
other conveniently when going in and coming out of the dock. This was
to communicate with two docks of 50 acres each, and a uniform depth of
water 30 feet, by means of two locks, each 900 feet long by 100 feet wide.
The cut and tidal basin were to have had a depth of water of 20 feet at
low water spring tides. On the south side of the southern dock, it was
proposed to construct four graving docks 900 feet long by 100 feet wide,
with a reservoir 600 feet square, supplied by a diversion of the Portishead
Pill. It was then proposed to connect the docks with the Avon by means
of a canal cut across the country, and running into the Avon near the
village of Pill, and also to have a railway to Bristol."

Mr. W. R. Neale, C.E., in 1853, also turned his attention
to the Somersetshire side of the river, and proposed that
which the engineers of the present Portishead Dock have
done, to convert the Portishead Pill into a floating dock.
There was to be an entrance harbour of about 16 acres
protected by two piers, the eastern pier to be 1,300 feet and
the western 1,000 feet in length, both duly provided with
slips and landing places.

The plans of Mr. George Thornton, C.E., are deserving of
some detailed description. His earliest was an acknowledged
HISTORY OF THE PORT OF BRISTOL.

abridgement of Mr. Rendel's, and comprised the formation of a dock of one half the size of that proposed by Mr. Rendel, but on the same site. He suggested the purchase of 70 acres of land on the Gloucestershire side of the river, and the reclamation of 70 acres from Dunball Island, the Swash, and the Channel of the river for the purpose of making the dock, to which there was to be an entrance lock of 800 feet by 130, capable of admitting any vessel of the size of the Great Eastern. The lock was to be divided into two portions, so as to provide for the passage of smaller vessels without materially diminishing the quantity of water in the dock. A graving dock, 895 feet by 130, was to be constructed at the end of the principal dock. In 1858 Mr. Thornton prepared the following elaborate plan for the dockising of the river Avon:

"The formation of an entrance 1,060 feet wide through the foreshore, by the removal of about 74,667 cubic yards of mud, and 49,777 cubic yards of sandstone rock, and by the construction of two straight wooden piers; that at the north of the entrance 1,155 feet in length, and that at the south 1,540 feet, or, as provided by a modification of the design, a north pier 1,874 feet in length, curving towards the south, and a south pier 821 feet in length, and inclined inwards towards the other, and forming a clear entrance from one pier head to the other of 990 feet, each with a depth of from 49 to 56 feet, and breadth at the base of 99 feet, including a landslip 40 feet broad, and with a slope of 1 in 57. The distance between these piers would gradually diminish, until at the shore end they approached to within 500 feet of each other, and terminated in a half tide or floating dock on the point of land at the south side of the mouth of the Avon, at which point the entrance would be divided into two smaller ones, each 130 feet wide, and separated by means of a quay 240 feet in length. The dock would have a wharfage of 2,040 feet, and an area of 9 acres excavated from the shore to the depth of low water of a 44 feet spring tide, being 2 feet into sandstone rock. The extreme length would have been 750 feet, and breadth 600 feet. The end facing the entrance
would be provided with entrance and departure locks, connecting the dock with the river Avon, and separated from each other by a quay 300 feet long. The locks would have had a depth of 36 feet of water at the sills, and would be closed by ordinary gates, but provided with caissons for occasional use, and would be sufficiently large to admit vessels 500 feet in length; but they were also divided by interior gates into lengths of 300 and 200 feet. The traffic over them was provided for by swing bridges 30 feet broad being thrown across the centre of each. The quay on the north side of the dock was continued along the side of the entrance lock, and from thence by a dam 1,000 feet long across the present channel of the river to the opposite shore, along which it was carried for a further distance of 4,620 feet. The Somersetshire side of the river was formed in a similar manner, with retaining piles and planking, and provided for a quay 2,500 feet in length, besides affording 638 feet of wharfage, connected with the two graving docks for ocean steamers, each 500 feet long by 100 feet broad, and an opening opposite the angle formed by the junction of the dam with the Gloucestershire bank of the river, equal to 200 feet, for the overflow of the surplus water, which was brought round in the segment of a circle, described with a radius of 300 feet on the inner side, until, having reached a point tending in a direction parallel to the length of the dock, and 420 feet from it, it was to have been carried into Kingroad through a channel 250 feet broad by 2,560 feet in length. The circular portion of this channel was to be arched over in 9 spans of 19 feet 3 inches each, and a headway of 10 feet above the level of water at Netham Dam; and the arches having been closed at the end facing Kingroad, by a self acting door-valve to keep out the tide. That part facing the swing bridges carried over the locks would be crossed by a lattice-girder bridge, 30 feet wide.

"On the land facing Kingroad, and to the south of the overflow-way, arrangements were made for 7 shipbuilding yards, each 650 feet deep, and with a wharfage of about 300 feet.

"The total length of quay accommodation would be 10,160 feet, with an average depth of 396 feet; and, together with the two landslips and part of the shore opposite Dunball Island, would be provided with 5,650 yards of railway.

"The quantity of land proposed to be purchased at the mouth of the
river amounted to about 292 acres; about 136 acres would be self-reclaimed at the Swash, and dockising the river gave about 600 acres of surface water.

"It was then proposed to cut a new course for the river at the point opposite the Powder Magazine, making the curve the same as at Kingroad.

"The improvements at Bristol consisted in the formation of a quay, extending in a straight line from Alderman Stephen's Almshouse, for 1,600 feet along the bank of the river, after which it was to be continued for a further distance of 1,000 feet in a line, forming an obtuse angle with its former direction. This quay was to have been provided with a line of railway extending its whole length, and connected with a new line to Bedminster Collieries, which would have a junction with the Bristol and Gloucester Railway. A portion of the opposite bank of the river would be cut off, forming, together with the above-mentioned quay, a channel 320 feet wide at its narrowest part, and having an entrance to the present floating dock of 110 feet wide, closed by a caisson, and crossed by a floating bridge. The width of the channel from the entrance to the floating dock to the angle formed by the opposite quay, was proposed to have been about 530 feet, giving sufficient room to turn a vessel of the same class as the Persia."

In 1860 Mr. Thornton proposed the construction of a small dock, with quay, &c., at Avonmouth, for ocean going steamships.

It is almost needless to remark that several other plans were proposed: some by engineers, and some, as Sir John (then Mr.) Hawkshaw said, by "amateurs actuated by a laudable desire for the improvement of the port." Amongst the former may be mentioned that put forward by Mr May in 1858, for the formation of a landing stage and dock at Dunball Island.

In 1859, when the question of dock accommodation occupied the attention of the Council, the Chamber of Commerce, and the citizens generally, three engineers officially reported on the capability of the port for improvement. They were Mr.
VARIOUS PLANS FOR IMPROVEMENT OF THE PORT. 93

Parkes, Mr. Green, and Mr. Thomas Howard, the last-named being then as now the engineer to the Docks Committee. Mr. Parkes favoured neither the formation of docks at the river's mouth, nor the dockising of the river; and suggested, instead, a widening, and in some places a deepening of the existing channels of the river, including the diversion of the tidal currents at the mouth of the river into the narrow channel between the land and Dunball Island. Mr. Green proposed, as far as possible, the restoration of the entrance of the river to its original course, by running out an embankment from the mainland on the Somersetshire shore to Dunball. The embankment was to be formed as a pier or landing place, and to extend below Dunball in a south-westerly direction to about 100 yards below the low-water line. An embankment and pier of a similar description were also to be carried out from the Gloucestershire side, leaving a sea way of from 300 to 400 feet between the extreme points of the piers, and Mr. Green contended that by these means "the entrance to the river would be so scourcd and deepened that any vessel might enter and lie afloat within the tidal harbour at any state of tide."

The tidal harbour was to be extended towards Pill with an average width of 1,500 feet, and with depth of water sufficient to enable any vessel to lie afloat and in safety until such time as she could proceed to Cumberland Basin or to sea. Mr. Green also suggested a general widening and deepening of the river.

Mr Howard, in his report, discussed the other plans that had been submitted, and expressed his approval of the suggestion for turning the whole of the river into a floating harbour. His own plan for accomplishing this end was to construct an outer tidal harbour on the flat foreshore at
Kingroad, on the Somersetshire side of the river. This harbour was to be enclosed by two piers, and would contain sufficient depth at low water to allow ordinary steamers to enter. In it there was to be a place for a floating landing stage, accessible at all states of the tide. A dam was to be carried across the river from the Somersetshire to the Gloucestershire side, near the Lighthouse. Between the outer tidal basin and the great float, two tidal basins, with inner and other locks, were to be constructed, and fitted with all modern contrivances for offering facilities for the passage of a large number of vessels. The three outer entrance locks would be respectively 100, 64, and 40 feet wide, and Mr Howard estimated the total cost of carrying out his plan at £800,000.

A Special Meeting of the Town Council was held in October 1859, to consider the report of Messrs Howard, Parkes and Green; and after much discussion it was resolved, on the motion of Alderman Abbott, to request the Docks Committee to refer these and other reports to Sir William Cubitt, C.E., and Mr. Page, C.E., and that those gentlemen should be requested to specially report if the scheme for converting the whole of the Avon into a floating harbour were practicable, and generally as to which of the schemes before them they preferred. For Sir William Cubitt Mr. John Hawkshaw was afterwards substituted. (It will be remembered that Sir John Hawkshaw was president of the British Association at the Bristol Meeting, 1875.)

Seven or eight months elapsed—the magnitude of the task principally causing the delay—before Messrs. Page and Hawkshaw presented their report. Mr. Hawkshaw, commenting in the first place upon the schemes for docks and piers at the mouth of the Avon, gave the preference to Mr.
Rendel's as being of good general arrangement, though too large and costly. He did not consider that the erection of piers outside the Avon would be effective for ocean steamers nor likely to attract them to the port, but he reported that the construction of docks at the mouth of the Avon was quite practicable, and such works could be made sufficiently capacious for ocean-going steamers, but he objected that docks at the river's mouth would encourage the growth of a population in the immediate neighbourhood, and would lead in the first place to a divided trade and ultimately to a competitive trade. Referring next to the schemes for the conversion of the Avon into a floating harbour, Mr. Hawkshaw spoke in high terms of praise of Mr. Howard's, though he believed Mr. Howard had under-estimated the cost, since there would have to be straightening, widening, and deepening the course of the river up to Cumberland Basin; the provision of a steam wharf in Bristol, and the providing for the sewage, which would increase the total cost to £1,200,000. With reference to the general question as to the desirability of dockising the river, Mr. Hawkshaw said:—

"A main question for consideration, which lies at the root of the whole matter, is, how far the anchorage of Kingroad would be affected by the entire abstraction of the tidal waters of the Avon, which such a scheme involves. This is a question not easily solved, and would admit of a great variety of opinions. I have been unable to arrive at a satisfactory conclusion upon it, but it is evident that a conviction of the absolute safety of such a step is necessary before the plan can be entertained; and the Admiralty would have to be made to concur in that conclusion before they could be induced to sanction it. You may, by comparing the total volume of water in the Avon with that in the Severn above Kingroad, be helped to draw conclusions as to the effect on the Severn, as a whole, of depriving it of the tidal waters of the Avon; but
no safe conclusions can be drawn from such comparisons as to the consequences to the anchorage at Kingroad. To determine this question, conclusively, would require a long and careful examination of the bed of the Severn, and of the strata underlying the banks, and shoals at and near to the confluence of the two rivers.

"I can at present see nothing in the configuration of the river Severn that will sufficiently account for the deep water at the mouth of the Avon, if the tidal waters of the latter river are assumed to have no effect in causing it. And if those waters are among the causes in any important degree, their abstraction might be fatal to the port of Bristol.

Summing up his general impressions he said:—

"There is no doubt at all that the river Avon can be straightened, widened, and deepened, and by that means greatly improved. I have already shown that this will, to a certain extent, be necessary if the river were converted into a floating harbour; and, on the whole, I have arrived at the conclusion, that the safest and most prudent course is to carry out this straightening, widening, and deepening. Every step taken in this direction may be made a safe one, and would not be inconsistent, but essential, towards any subsequent improvement to the port. But I am not of opinion, that by straightening, widening, and deepening the Avon, you will secure ocean steamers of the largest class coming up the Avon to Bristol.

"It appears to me to be more probable that if such steamers were to frequent the port they would remain at the mouth of the Avon, within the entrances, where the depth of water and space would be largest. They would, I think, wish to avoid the seven miles of circuitous navigation, and the interference, in a confined channel, with other craft; and I am of opinion, that if the Corporation are disposed to invest money on the faith of securing ocean steamers, they will be likely better to succeed by constructing a steam dock at the mouth of the Avon, for the sole accommodation of such steamers, and connecting the dock with Bristol by a railway laid on the margin of the river."

"The course I recommend is, for the improvement of the river to be proceeded with at once, leaving the dock to be carried out as necessity proves requisite. It will be desirable, however, in straightening and
VARIOUS PLANS FOR IMPROVEMENT OF THE PORT.

widening the river, to provide room on the right bank, as far as practicable, for laying down rails, in the event of the dock being soon needed. This will not entail any great expense, as from the nature of the works a space will in some places necessarily be obtained for the purpose."

Mr Page also spoke highly of Mr Howard's reports, but he did not coincide in the opinion that the Avon ought to be turned into a floating harbour, and for these reasons:—1. The interference with the tidal action of the Avon, and the probable prejudicial effect on the depth of water at the entrance to the proposed docks at the mouth of the Avon. 2nd. The great expense of the plan, combined with the expense of diverting the sewage; and 3. The interference with the trade as carried on with sailing vessels, and the necessity of towing all such ships up to the Bristol docks. Summing up, he said:—

"It may be presumed that it is not requisite for the advancement of the commercial interests of Bristol, that all the ships entering the Avon should come into the docks, provided the cargoes are brought there; and it is evident that the great requirements consist, first, of a landing place for passengers immediately on the arrival of the ship in Kingroad, and facilities for their journey inland; secondly, of the means of discharging, rapidly, extensive cargoes, and transmitting them to the warehouses at Bristol, to the ships in the Bristol Docks, or to the railways connected with the city, and again reloading the ship and despatching her on her voyage."

"The most economical and the readiest mode of combining these objects is to construct a pier, with its termination in four fathoms of water, adjoining Kingroad; to provide powerful hydraulic apparatus for lifting cargoes; and to make a railway from the pier to all the docks, quays, and warehouses of Bristol, with extensions to the great railways."

"This combination would transfer in the least time, and at the least expense, merchandise between the steam ships and the docks."

"The position of the pier would be regulated by the design for the
progressive improvement of the port, and by the nearest approach of the land to deep soundings. After much consideration, I prefer to place the pier on the east side of the Avonmouth, carrying it into four fathoms at low water springs into the Severn, and running to the point of land near the battery, making a total length north from the low water line of 245 yards, and from low water line to the land 465 yards. The pier head would be 600 feet in length, accommodating there alone at one time four large ships for loading or discharge.

"I would deepen the channel inside the pier to three fathoms for a certain distance, for the convenience of ships of less draught of water than the ocean steam ships.

"The increase of trade to the port by the working of the pier and railway, would provide the funds for certain collateral improvements in the river itself, and especially of such increase of depth in that part of it to a distance of 3½ miles below Cumberland Basin, as would allow vessels of 22 feet draught of water to come up to the docks at neap tides."

Mr. Page's plan was to be progressive, and he proposed that in course of time, as the exigencies of trade might require, there should be a dock constructed at Avonmouth, and the pier would then form one side of the dock, which was to be erected on the site suggested by Mr. Rendel. The area of the docks and basin, according to Mr. Page, was to be 117½ acres.

Mr. Page subsequently forwarded to the Docks Committee a statement as to the size and cost of the Dock he proposed at Avonmouth. It was to be 2,100 feet long, and 440 wide, making an area of 25 acres. The tidal basin was to be 800 feet in length and 600 in width, and the total cost of the plan £260,000.

Shortly after this the Chamber of Commerce passed a resolution asking the Council to construct a dock at the mouth of the river, and at a special meeting of the Council in
October, 1860, Mr. E. S. Robinson moved that the Council instruct the committees on increased dock accommodation to take the necessary steps for obtaining an Act of Parliament, to effect the improvement of the port on Mr. Page's plan, subject to the estimates for the same being restricted to £400,000. Mr. C. Nash, seconded the motion, and there was an amendment, moved by Mr. W. Herapath, and seconded by Mr. Coates, to the effect that the Council would promote a well-considered plan, as far as the surplus resources of the dock estate could be made available, but that it would not sanction any scheme for dock extension, the fund for which was to be defrayed by taxation, or to be guaranteed by the ratepayers. After a long meeting, the Council adjourned to the following week, and then they had another sitting of five hours' duration, after which the resolution was carried by a majority of eleven. At a subsequent meeting, in February, 1861, the Council resolved, by a majority of 32 to 17, on the motion of Mr. R. P. King, "That it is not expedient to incur any further liability on the fixed property, for the purpose of making dock accommodation for ocean steamers at the mouth of the river."

Then there followed, in the Council and out of it, a long series of debates and discussions, forming on the whole, "The battle of the docks."

The Corporation possessed land at Portishead, and several members of the Council favoured the civic recognition of docks on the Somersetshire, rather than on the Gloucestershire side of the Avon. The Corporation went to Parliament in 1861, with a scheme for widening and improving the river; and an independent company—known as the Port and Pier Railway Company—sought for powers to con-
structure a railway from Clifton to Avonmouth, and a pier at the latter place. Both were opposed, and both in 1861, were unsuccessful. In the following year the promoters of the bill, including Messrs. P. W. S. Miles, R. Bright, and C. J. Thomas, were once more opposed, though the Corporation decided by a majority not to officially oppose. The bill passed the committee, and became law in July, 1862. The railway was commenced in 1863, opened in 1865, and a short pier was constructed, running out into the passage, which at that time existed between the Gloucestershire side and Dunball Island. This passage has been for some time virtually closed, and the pier at present is useless.

Previously to the completion of the line—in 1864—another Company was formed, consisting almost entirely of members of the Port and Pier Company, for the construction of the Bristol Port and Channel Dock. Mr. P. W. S. Miles is chairman of the company, and Mr. J. E. Penny, secretary. The capital was at first put down at £295,000, to be raised in £20 shares, and on August 26th, 1868, the first sod of the docks was cut by Mr. Charles Nash. A contract with Mr. Lawrence, of King's Lynn, having been entered into for the construction of the docks, for the sum of £383,000. The total cost is at present estimated at upwards of £600,000. The dimensions of the dock as finally arranged by Mr. Brunlees, the engineer, will be found under the heading "Avonmouth Dock and the Floating Harbour." The company reserved a large area of land for extending the dock.

Side by side with the Avonmouth scheme, grew that for the construction of docks at Portishead, the promoters being the directors of the Bristol and Portishead Pier and Railway Company, whose line had been opened in April, 1867. Mr.
J. Ford is chairman, and Mr. J. F. R. Daniel, secretary. The engineers, Messrs. Mc'Clean and Stileman, prepared a plan for a dock, taking advantages of the natural harbour, formed by the pill; and the works comprised a basin between the pier, which had previously been erected, and a second pier to be erected on the eastern side; a lock 561 feet long and 66 feet wide, and a floating dock 1,800 feet long and 500 feet wide; a timber pond of 13 acres and a graving dock were also included in the plans. Messrs. Barnett & Co., of Westminster, are the contractors, and the works commenced in 1871, immediately upon the passing of the Act, are now in a very forward state. It is confidently expected that the dock may be finished early in 1878.

In 1871, in accordance with a clause in the Portishead Docks Act, and also with a clause in the Port and Channel Docks Acts (extension of time,) the Board of Trade, nominated Messrs. D. Stevenson, C.E., and J. Ball, to investigate the position and prospects of both undertakings. Their joint summary was to the effect that both of the proposed undertakings were fitted to effect the object in view, namely, the reception, accommodation, and the loading and unloading of ocean-going steamers and sailing vessels of large dimensions; that both the companies had available Parliamentary powers to raise capital sufficient to complete the undertakings with all necessary machinery and works; that the Bristol Port and Channel Dock Company, whose works were in progress, could complete its undertaking under existing contracts, but that the Bristol and Portishead Dock works must obtain further subscriptions to its share capital to the extent of £118,000. They added that the early provision for sea-going steamers, which was regarded as
indispensable to the interests of the port of Bristol, would be materially facilitated by the Corporation subscribing to the share capital of both. This important question came before the Council at special meetings in June and July, 1872, and the Council resolved by 33 votes to 22 not to contribute to the Avonmouth Docks; and by 36 votes to 19 to subscribe £100,000 to the capital of the Portishead Docks Company.

The Corporation besides aiding the Portishead undertaking, resolved to spend a considerable sum in improving the existing harbour, and in accordance with plans of Mr. Howard, C.E., the new works at Cumberland Basin were proceeded with in 1872-3. New entrance locks were built, and the entrance to the basin from the river was made at a far less acute angle. An inconvenient bridge near the Rownham Inn, and even that venerable hostelry, as well as the famous Hotwell House, had to make way for wide roads; and a further improvement was effected by the building of a floating landing stage outside the harbour. As a coincidence it may be mentioned that the Juno, the first vessel to enter Avonmouth Dock, was the first vessel to pass the new lock at Cumberland Basin, on July 19th, 1873.

THE TIDES IN BRISTOL CHANNEL.

The Bristol Channel and the Bay of Fundy are the most remarkable estuaries in the world for the rise of tide. In reporting to the Council, Mr. Page said:—The tidal wave which enters the Bristol Channel from the Atlantic, reaches Cape Clear at four o'clock on full and change of the moon, with a rise of 9 feet at springs, reduced to $\frac{6}{2}$ feet rise
at neaps; it makes the Scilly Isles at 4h. 30m., with 20 feet at springs and 15 feet at neaps; St. Ann's Head at 4h. 56m., with 24 feet at springs and 16 at neaps; Lundy Island at 3h. 15m., with 27 feet at springs and 20 feet at neaps; Nash Point, at 6h. 15., with 33 feet at springs and 17 feet at neaps; Steep Holm at 6h. 37m., with 38 feet at springs and 21 feet at neaps; and Kingroad at 6h. 56m., with 44 feet at springs and 33 feet at neaps, thus increasing 35 feet in rise in a course of 300 miles. Taking the rise from the mean level of the sea, the level of high water at Kingroad would be 17 feet 6 inches above the high water at Cape Clear; and the level of low water would be 17 feet 6 inches below the low water at that Cape.

In the Bristol Channel itself, Kingroad, which is near the new docks, has the maximum rise. It is 22 feet 4 inches greater than at Swansea, 68 miles below the anchorage; and 17 feet greater than at Sharpness Point, 19 miles above Kingroad.

It may be interesting, by way of comparison, to note the rise of tide in the Bay of Fundy. Commencing with a rise of 7 feet at springs at Clam Point, the rise increases to 12 feet at Seal Island; 16½ feet at Yarmouth; 19 feet at Cape St. Mary; 22½ feet at Sandy Cove East; 30 feet at Annapolis; 34 feet at Fort George; 37½ feet at Black Rock Lighthouse; 44 feet at Grindstone Island; and 50 feet at Cumberland Basin, Sackville, having increased 43 feet in rise in the course of 200 miles.

In connection with this part of the subject we may mention that the Severn Bore, the phenomenon which has recently occupied the attention of Mr. Frank Buckland, formerly threw off a little bore into the Avon. The Pill pilots of the
last generation well remembered this diminutive Bore running up with a head of two feet as far as the old Hotwell House. We believe it is scarcely observable now; the silting up of the old entrance to the Avon and the opening of the Swash having probably had some influence, in conjunction with the shifting of the bed of the Severn, in bringing about the change.

**COMPARATIVE RETURNS OF THE TRADE OF THE PORT.**

Inquirers for definite information as to the extent of Bristol trade prior to a comparatively recent time, can find but little to repay their toil. Of generalities they can find plenty. When an old chronicler wished to impress his readers with an idea of the extent of Bristol trade, he said there was "much shipping," and left them with about as accurate an idea of his meaning as that stereotyped witness in a law court gave the jury, when he described a stone as being about the size of a lump of chalk. There is such a morsel of fact to such intolerable quantity of description. However, in 1437, when the Mayor of Bristol was required to furnish the Crown with a representation of the receipts and profits of the city, he supplied a list of 220 vessels, with the particulars of the dues charged on each, amounting to £2116s.8d. In the reign of Edward the Fourth it was stated that the customs payable to the King's household from the port of Bristol were assessed at £400; and 100 years later, in the reign of Elizabeth, the yearly value of the customs was estimated at £500. It is obvious, however, that it is impossible to estimate the trade with any degree of certainty by the customs returns, since
the amount of dues charged at various times has differed greatly.

In 1572, a general registration of the shipping in the kingdom was made, and the result appears to show—and, indeed, does show, if the information previously given of Canynge’s fleet can be relied on—that local commerce had retrogressed greatly since the days of the great Bristol merchant. The return showed that Bristol possessed 53 merchant ships, with a tonnage of 1,993. In 1608-9, a period of great dearth, there was a large importation into Bristol of corn from Dantzic and other places, and in the course of a year 60 ships brought hither 112,439 bushels of rye, wheat, and barley. A few years later we find that in nine months—from September, 1613, to June, 1614—104 vessels brought corn to the port to the extent of 25,105 qrs. In 1635—the year after the first imposition of ship money—the city paid £25,000 for customs. Towards the close of the century some merchants were suspected of defrauding the Royal Exchequer, and in 1691, John Dutton Colt, the collector of customs for the port, discovered a conspiracy between the Custom House Officers and these merchants. Mr. Taylor, in his contribution to “Bristol and its Environs,” says that Colt recovered for the King £2,772, besides £500 which the officers were fined. The officers had, further, “to stand publicly at Bristol, at assize time, with a paper signifying their crimes.” Returns of customs at about this date could evidently not be relied upon.

The first authentic and official record of the number and measurement of ships belonging to the different ports of England, is derived from a return issued for the Commissioners of Customs, 1701-2. The following is the return for the
principal ports at that time, which we extract from Mr. Capper's excellent work, "The Port and Trade of London": —

<table>
<thead>
<tr>
<th>Ships</th>
<th>Tons</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>560</td>
<td>84,882</td>
</tr>
<tr>
<td>Bristol</td>
<td>165</td>
<td>17,338</td>
</tr>
<tr>
<td>Yarmouth</td>
<td>143</td>
<td>9,914</td>
</tr>
<tr>
<td>Exeter</td>
<td>121</td>
<td>7,107</td>
</tr>
<tr>
<td>Hull</td>
<td>115</td>
<td>7,564</td>
</tr>
<tr>
<td>Whitby</td>
<td>110</td>
<td>8,292</td>
</tr>
<tr>
<td>Liverpool</td>
<td>102</td>
<td>8,619</td>
</tr>
<tr>
<td>Scarborough</td>
<td>100</td>
<td>6,860</td>
</tr>
</tbody>
</table>

These were the only ports with as many as a hundred ships, but Newcastle had 63 vessels, measuring 11,000 tons.

The gross customs receipts for Bristol for the eight years, from 1750 to 1757 inclusive, amounted to £2,314,922, increasing from £242,283 in 1750 to £351,211 in 1757; whereas in Liverpool the gross receipts for the same term were £1,614,898, varying from £163,597 in 1751 to £258,456 in 1754. The net remittances from Bristol averaged £155,189, and from Liverpool, £51,136. In 1764 we find that the net remittance from Bristol was £195,000, and from Liverpool, £70,000; and 2,353 vessels entered inward at the Bristol Custom House during that year. The wharfage increased from £900 in 1745 to £2,000 in thirty years.

In 1788 there was a return of Bristol ships. It was estimated that there were a thousand employed as coasters, there were engaged in trading to Jamaica, 34; to the Leeward Islands, 38; to Africa, 37; to Newfoundland, 33; to North America, 50; and to Ireland, France, Spain, etc, 200,
Coming down to the present century, we find that in 1805, the first complete year after the docks were opened, the income through dues, &c., amounted to £11,353 11s. 5d. From 1805 to 1815 (a period, it must be remembered of almost constant war) the average yearly income was £18,508 7s. 7d.; during the next ten years it was £24,302 4s. 3d.; from 1825 to 1835 there was a falling off, the average being £21,931 17s. 2d.; and from 1835 to 1845 it was £29,584 6s. 8d. As before mentioned in 1848 the success of the Free Port Movement caused a great reduction in dock dues, in some cases as much as two-thirds of the duty being remitted; but the result of the policy was that in the decade from 1845 to 1855 the income only fell off one-third, thus showing that about double as much trade had been done. The average income for that period had been £21,446 7s. 4d.; from 1855 to 1865 it was £27,316 16s. 9d.; and from 1865 to 1875 it had reached £40,476 2s. 5d.

With reference to two of the most important branches of the trade of the port, Mr Girdlestone, the secretary to the Dock Committee, proved before the Railway Commissioners the following statistics:—In 1848 the registered tonnage of vessels with grain entering the port of Bristol was 24,084 tons; in 1849 it was 28,176 tons; in 1850, 28,757; in 1851, 20,715; and in 1852, 25,886 tons. From 1872 to 1876 it was as follows:—138,703, 130,111, 135,993, 142,830, and 175,430 tons. With regard to timber, the registered tonnage of vessels laden with deals and timber coming to Bristol in 1848 was 54,583 tons; in 1872 it was 97,536; and in 1876, 134,210 tons.

The following statistics of the trade of the port are compiled from the last two reports of the Chamber of
Commerce. They are calculated to the 30th of April in each year, with the exception that the "outwards" are taken from the Customs returns of the 31st December in each year. The Customs return for 1875 included vessels cleared in ballast as well as with cargoes, thus fallaciously increasing the export tonnage:

<table>
<thead>
<tr>
<th></th>
<th>1869</th>
<th>1871</th>
<th>1873</th>
<th>1875</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonnage of shipping, with imports of sugar</td>
<td>50472</td>
<td>63740</td>
<td>68625</td>
<td>67194</td>
</tr>
<tr>
<td>Timber</td>
<td>81371</td>
<td>99945</td>
<td>100708</td>
<td>96183</td>
</tr>
<tr>
<td>Grain and flour</td>
<td>82488</td>
<td>101161</td>
<td>141250</td>
<td>141720</td>
</tr>
<tr>
<td>Other produce</td>
<td>76632</td>
<td>90969</td>
<td>10042</td>
<td>11688</td>
</tr>
<tr>
<td>Total foreign: inwards</td>
<td>290963</td>
<td>355815</td>
<td>411014</td>
<td>416755</td>
</tr>
<tr>
<td>Tonnage of Irish and coast-wise vessels paying 4d per ton</td>
<td>310732</td>
<td>323923</td>
<td>332677</td>
<td>316315</td>
</tr>
<tr>
<td>Other coasters paying per voyage</td>
<td>266088</td>
<td>247728</td>
<td>262662</td>
<td>255609</td>
</tr>
<tr>
<td>Total home: inwards</td>
<td>570820</td>
<td>571651</td>
<td>595399</td>
<td>571924</td>
</tr>
<tr>
<td>Total home and foreign:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>inwards, with cargoes</td>
<td>861783</td>
<td>927466</td>
<td>1006353</td>
<td>988679</td>
</tr>
<tr>
<td>Add total outward*</td>
<td>469193</td>
<td>526608</td>
<td>520438</td>
<td>950654</td>
</tr>
<tr>
<td>Grand total, inward and outward, tons</td>
<td>1330976</td>
<td>1454074</td>
<td>1526791</td>
<td>1949333</td>
</tr>
</tbody>
</table>

The value of exports from Bristol from 1868 to 1876 inclusive, are estimated as follows:—1868, £216,842: 1869, £191,869: 1870, £257,879: 1871, £289,250: 1872, £367,951: 1873, £356,557: 1874, £370,835: 1875, £324,400:

* From the Customs Returns, year ending 31st December.
The falling off in 1876 is due chiefly to a decrease in iron, steel and tin. There is an increase of £1,205 on woollen manufactures. The gross revenue of the port in 1875 was £792,521, and in 1876, £771,343 13s. 1d. From the Custom House returns made up to December 31st, 1876, we find that there was a decided increase in the importation last year of maize, beans, flour, flax, fruit (currants, figs, oranges, and raisins,) palm oil, seed oil, wine, and tallow, and a decrease in cocoa, barley, linseed, rum, and wool. There is not much change in other commodities, including tea, wheat, sugar, and timber. The exports of the principle articles of foreign and colonial merchandise show a general increase in 1874 and 1875, particularly in tobacco, unrefined sugar, tea and coffee. There is a decrease in spirits. In 1876 the number of direct importations and removals to this port of foreign goods from other ports under bond was 4,393, compared with 4,336 in 1875, and 3,950 in 1874. The total number of ships with their tonnage, exclusive of steam vessels that entered inwards and cleared outwards with cargoes to and from foreign parts in 1876, was, inwards, 1,030 vessels, 335,269 tonnage; outwards, 112 vessels, 29,995 tonnage. This was a slight decrease in the number of vessels, but an increase in tonnage.

With regard to a very important part of modern Bristol trade, that in steam vessels to and from foreign ports with cargoes, there is an increase of 29 vessels inwards, and a tonnage of about 25,000 compared with 1875, the number last year being 291 steam vessels, and 149,078 tonnage; there were cleared outwards 93 (an increase of two) vessels with a tonnage of 47,738 (an increase of over 1,000.)

In 1871, Mr. William Smith, the present high sheriff,
published a coloured chart illustrative of the shipping of various ports, and showed most clearly the great disparity between the slow advance in the Bristol steam trade with that of other ports, and its publication must have strengthened the desire for better accommodation for ocean-going steamers. In 1869, the latest year quoted by Mr. Smith, the tonnage of steam vessels entered inwards with cargoes was only 29,632, so that in seven years—in a great measure, no doubt, owing to the American trade—it has been multiplied five times.

Having brought the history of the port down to the month of February, 1877, the curtain rises on what is certainly an encouraging picture. The city has now a population double that it had at the beginning of the century, and within the last few years, industries previously unknown have here arisen to give employment to thousands. But, as no amount of manufacturing success would entirely compensate for a loss of Bristol's natural and historical standing as a seaport, it is gratifying to all loyal citizens to find the old spirit of enterprise again shown in connection with maritime affairs. In reading the history of the port, one is continually reminded of the ideas of past generations as to what constituted success, and expressions of admiration for the wealth and extent of the trade of the city abound; and yet the Bristol of to-day is far in advance of any past age in the importance of its commerce. If modern local enterprise means anything, it is that this development will be intensified, and future generations will probably regard with some surprise the dimensions of the Bristol trade of to-day. It is, however,
consolatory to remember that in looking back to the work of this generation, they will find that after a period of inaction, Bristol addressed itself with vigour to the task of regaining its proper position amongst the English ports, and prepared the way for further success.

AVONMOUTH DOCK AND THE FLOATING HARBOUR.

The distinguishing characteristic of the Bristol Port and Channel Dock is that it will accommodate vessels of the largest class. It is the deepest dock in the world.

The old harbour is situate in latitude 51° 27' North, longitude 2° 35' West, and the new dock is about six miles distant, at the junction of the Avon with the Severn, and less than a mile from the fine anchorage of Kingroad. Mr. J. B. Mackenzie, the resident engineer, thus describes the main features of the dock and its approaches:

"The approach to the lock forms a tidal basin of 350 yards in length by an average width of 70 yards; it has a depth at high water equinoctial spring tides of 44 feet 6 inches, and of 40 feet at ordinary spring tides. Its position is in a direct line with the fairway of the Channel leading to Kingroad. The lock is 454 feet in length, and 70 feet in width; the depth of water over the cills at high water of equinoctial spring tides is 42 feet; 37 feet 6 inches at ordinary spring tides; and 26 feet at ordinary neap tides. These depths, together with the safe and easy approach, afford to vessels of heavy draught advantages that cannot be obtained at any other port. The dock is 1,400 feet in length and 500 feet in width, giving an available water area of 16 acres, and the depth of water to be constantly maintained will not be less than 26 feet. The total length of quay wall is 3,200 feet, exclusive of 500 feet of slope for unloading timber cargoes."
Details of appliances for discharging vessels, &c., are set forth in the accompanying plan.

The distance from Avonmouth to London, by rail, is 125 miles; to Birmingham 97 miles.

For comparative purposes it may be stated that the present water space kept at one level at Bristol, and known as the Floating Harbour, has an area of about 130 acres, of which about 55 are available for large vessels. This harbour is entered by two half-tide basins—Cumberland Basin, having an area of about four acres, and locks 54 and 45 feet wide; and Bathurst Basin, having an area of two acres, and locks 36 feet wide. Small craft going inland are accommodated with a single lock.

The public quays of the Floating Harbour (according to a pamphlet published by Mr. Leonard Bruton) are 2,000 yards in length, while the frontage available in that part of the harbour appropriated to masted ships is about 7,000 yards.

The depth of water available at the Bristol Port and Channel Dock, and at Cumberland Basin is shown in the following—
### The Tides

#### Tide Gauge

<table>
<thead>
<tr>
<th>Level</th>
<th>FT</th>
<th>Level of Quay Cope at the New Dock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraordinary Tide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary High Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary Low Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest High Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zero of Tide Gauge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Water</td>
<td>30 ft</td>
<td></td>
</tr>
<tr>
<td>Neap Tide</td>
<td>20 ft</td>
<td></td>
</tr>
<tr>
<td>Neap Tide</td>
<td>10 ft</td>
<td></td>
</tr>
<tr>
<td>Springs</td>
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<td>Low Water</td>
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*Ordinary High Water, Ordinary Low Water, Neap High Water, Neap Low Water, Springs, Low Water, Extraordinary Tide, Jan. 30, 1877*
BRISTOL PORT AND CHANNEL DOCK.

GROUND PURCHASED BY GREAT WESTERN AND MIDLAND RAILWAY COMPANIES FOR SIDINGS

REFERENCES TO THE PLAN.

A.—35 cwt. hydraulic pedestal quay crane.
B.— Ditto ditto ditto.
C.— Ditto ditto ditto.
D.— Ditto ditto ditto.
E.—35 cwt. moveable hydraulic quay crane, working between A and B.
F.—15 ton hydraulic pedestal quay crane.
G.—Three portable steam cranes, to lift from 3 to 5 tons, and working between C and D.
H.W.S.T.—High water spring tides.
L.W.S.T.—Low water spring tides.
Total length of quay wall,3,200 ft.
Warehouses, 200 feet by 60 feet.
Clear length between inner and outer gates available for locking, 454 feet. Width of lock, 70 ft.
Depth of water on cills at high water ordinary spring tides, 42 feet.
Depth of water on cills at ordinary spring tides, 37 feet 6 inches, and 26 feet at ordinary neap tides.
Distance from Dock to London, 125 miles; to Birmingham, 97.
Area of Dock 16 acres.
Land reserved for extension of dock works, 50 acres.
THE OPENING OF AVONMOUTH DOCK.

On Saturday February 24th, 1877, the Bristol Port and Channel Dock at Avonmouth was formally declared open "to the commerce of the whole world." As the time for the official declaration of the success of the enterprise approached, a great amount of public interest was manifested in the event; and although the occasion was not made one of civic display, the satisfaction with which the completion of the undertaking was regarded, gave rise to a significant and spontaneous demonstration.

The arrangements of the directors of the Channel Dock Company, were of a very unostentatious character, and were confined to a formal opening of the new dock by the Mayor of Bristol (Ald. G. W. Edwards) who, with a party of invited guests, sailed on board the Juno steamship, (Captain Starr, Commander,) from Cumberland Basin to the dock; but the interest of the public was unmistakeably shown by the multitude of spectators who gathered at Cumberland Basin, and lined the sides of the river to cheer the occupants of the Juno as they sailed on their short but eventful voyage, by a very general observance of a holiday in the city; and by the very large assemblage at Avonmouth to witness the brief inaugural ceremony. The shipping in the harbour was gaily decorated, the church bells rang merry peals, and there were abundant proofs that the event of the day was regarded as one of pleasing importance by all classes of citizens.

As a souvenir of so important an occasion, the following list of the company on board the first steamer that ever entered Avonmouth Dock, may be interesting:—
The MAYOR of Bristol (Ald. G. W. Edwards), and the MAYORESS.

The HIGH SHERIFF of Bristol (Mr. William Smith).

Mr H. Adams, Mr Aiken, Mr P. D. Alexander, Mr Lancelot Ashcroft, Mr S. Alexander, Mr E. Austin, Mr A. Austin, Mr G. C. Ashmead, Mr T. Adams, Mr A. J. Alexander, Mr C. Andrews, Mr F. Ashmead, Mr J. Arrowsmith, Mr U. Alsop.
Mr A. Brogden, M.P., Mr G. Bright, Ald. W. Proctor Baker, Mr W. Henry Budgett, Mr Samuel Budgett, Mr James Brunlees, C.E., Mr John Brunlees, C.E., Major Bush, Alderman Brittan, Mr Billings, Mr J. Boon, Mr R. I. Brightman, Mr W. Baker, Miss Baker, Miss Julia Baker, Miss Ethel Baker, Mr Barry, sen., Mr W. Boon, Mr J. Bicknell, Mr B. G. Burroughs, Mr David Bell, Alderman Butterworth, Mr W. Hill Budgett, Mr A. F. Brunt, Mr Edward Branth, Mr Bessone, Mr W. Butcher, Mr D. Travers Burges, Mr H. W. Boorman, Dr. Bartley, Mr W Barge, Mr Blood, Mr T. Bright, Mr F. J. Bissicks, Mr T. Bissicks, Mr F. Barnard, Mr J. K. Bone, Lieut.-Col. S. Bishop, Mrs Stephen Bishop, Mr G. H. Bush, Mr G. de Lisle Bush, Mr J. Bartlett, Mr A. R. Bodley, Mr R. G. Barnes, Mr J. Blair, Mr T. Bradford, Mr A. W. Harvey Bellingham, Mr G. M. Barnes, Mr Bird, Mr J. Bell, Mr C. F. Bennett, Mr Barrow, jun., Mr Oscar Cohu Berry, Mr C. A. Badcocke.

Mr F. Cordeux, Mr Cordeux, jun., Dr. Theodore Canisius (American Consul), Major Castle, Mr R. Coaffee, Dr. T. Edward Clark, Mr F. Clements, Mr R. Cripps, Mr H. B. Cornaby, Mr E. G. Clarke, Mr J. Cole, Captain Cox, Mr E. W. Coathupe, Mr J. Curry, Mr G. Cooke, Mr A. Cameron,
Mr R. Carpenter, Mr S. Cashmore, Mr J. Crosby, Mr G. Carter, Mr E. Clinch, Mr Crook, Mr S. D. Clinch, Mr. E. G. Camp, Mr J. H. Clarke, Mr Lyon Campbell, Rev. N. Cornford, Mr Cloutman, Mr G. Chapman, Mr W. Claxton, Mr. A. F. Coombs.

Mr and Mrs Henry Daniel, Mr and Mrs Harry A. H. Daniel, Mr and Mrs Matthew Dunlop, Mr Hew Dalrymple, Mr James Derham, Mr and Mrs Henry Derham, Mr Drake, Mr A. Deedes, Mr J. W. Dodd, Mr J. W. S. Dix, Mr David Davies, Rev. C. R. Davy, Mr and Mrs George Davies, Mr C. T. Dando, Mr Joseph Drinkwater, Miss Dobbin, Miss Dawson, Mr A. E. Dimoline.

Mr Ellis, (chairman, Midland Railway Co.,) Mr D. Parker Evans, Miss Evans, Mr A. M. Edwards, Mr H. G. Edwards, Mr S. W. Edwards, Mrs Wm. Edwards, Miss Edwards, Miss L. A. Edwards, Miss Esain, Mr G. M. Eager, Mr P. H. Eyre, Mr A. Essery, Mr J. Eyre.

Alderman Fox, Dr. Fox, Mr C. Fussell, Mr W. L. Fear, Mr and Mrs C. Fisher, Mr F. W. Fox, Mr E. Follwell, Mr H. Fedden, Mr W. Fiddes, Mr T. H. Fisher, Mr Henry G. Foster, Mr G. Finzel, Mr J. C. Fear.

Dr. H. H. Goodeve, Mr L. A. Goodeve, Mr Christopher Godwin, Mr H. G. Gardner, Capt. Green, Mr T. Gibson, Mr F. B. Girdlestone, Mr T. Holmes Gore, Mr T. Gillford, Rev. R. Glover, Mr W. H. Gregory, Mr Walter Grogan, Mr W. M. Gibson, Mr J. C. Gilmore, Mr E. A. Green, Mr T. Graham, Capt. J. A. Gardner, Mr E. A. Greenslade, Mr T. Glass, Mr J. H. Griffin, Mr S. Grant, Mr J. F. Griffin, Mr F. C. Griffin, Mr James Gill.

Alderman S. V. Hare, Mr C. B. Hare, Mr C. F. Hare, Mr John Harford, Mr W. H. Harford, junior, Mr H. Husbands,
Mr H. H. Hodge, Mr H. Humphries, Mr Hitchins, Mr C. O. Harvey, Mr John E. W. Honnywill, Mr E. Halsall, Mr F. Handcock, Mr C. Handcock, Mr R. I. Hewett, Mr E. J. Hatherley, Mr J. G. Heaven, Mr W. Highman, Mr C. P. B. Howell, Mr J. Hennessy, Mr Hennessy, junior, Rev. F. and Mrs Hastings, Mr T. Howard, Mr F. Howard, Mr O. Hosegood, Mr P. Hallett, Mr Hearne, Mr R. Harding, Mr Stephen Harding, Mr W. Hawkins, Mr F. J. Hatton, Miss E. Hirst, Miss M. Hirst, Mr John Hayward, Mr W. W. Hughes, Mr Thomas Harris.

Mr James Inskip.

Alderman J. A. Jones, Mr and Mrs Fred. James, Mr W. W. Jose, Mr H. R. James, Mr J. Jupe, Mr R. F. Jones.

Mr Edwin Knight, Mr Kemball, Mr W. Kearsey.

Alderman F. Lucas, Mr John Latimer, Mr W. C. Lucy, Mr C. H. Low, Miss E. Lawrence, Mr F. Lawrence, Mr Joseph Leech, Mr Lowick, Mr F. Laverton, Mr R. E. Laverton, Mr Arthur Laverton, Mr Lindrea, Mr J. Lucas, Mr G. H. Leonard, Mr H. F. Lawes, Mr H. F. Lawes, jun., Mr Llewellyn, Mr J. Latcham, Mr J. Longman, Mr J. Lysaght, Mr W. Lane, Mr W. Lemon, Mr G. W. Lucas, Mr J. Lewis, Mr Crosby Leonard, Mr Robert T. S. Lucas.

Mr P. Stewart Macliver, Mr Jerom Murch (Mayor of Bath), Mr H. Cruger Miles, Mr John W. Miles, Mr W. H. Miles, Mr R. Fenton Miles, Ald. Morgan, Mr G. Miles, Mr R. Mackworth, Mrs Morse, Miss H. O. Morse, Mr H. Matthews, Mr McKerrow, C.E., Mr Samuel Miller, Mr T. Miller, Rev. A. G. Morris, Mr F. Moline, Mr J. Morgan, Mr H. J. Mills, Mr G. A. Miller, Mr J. B. Moore, Mr H. Maby, Mr W. E. Maggs.

Mr Charles Nash, Miss M. A. Nash, Miss G. M. Nash,
Rev. J. E. Nash, Mr Henry Naish, Mr. J. F. Norris, Mr J. F. Nicholls, Mr S. F. Nicholls, Mr Osborne Nash, Mr Nott.

Mr J. Osborne, Mr D. S. Oliver, Miss Edith M. Oliver, Mr H. Oldland, Mr C. Osborne.

Mr A. N. Price, Mr C. Price, Mr C. Pebody, Captain Parsons, Mr H. C. Penny, Mr W. T. Palmer, Mr and Mrs G. F. Powell, Mr Peters, Mr Phillips, Mr J. Phelps, Mr W. B. Peck, Mr G. J. Picken, Mr H. C. Perry, Captain Perry, Mr B. Pring, Mr W. Polglase, Mr T. Pope, Mr Pearson, Mr. J. L. Press, Mr J. Parsons, Mr S. B. Parsons, Mr J. Pope, Mr C. Pope, Mr J. Payne, Mr J. P. Perry, Mr Pike, Mr J. Pace, Mr Prankard, Mr E. Josiah Pritchard, Mr Henry Parker.

Ven. Archdeacon Randall, Mr Elisha Smith Robinson, Miss M. E. Robinson, Mr Kossuth Robinson, Mr Alfred Robinson, Mr Alfred Roberts Robinson, Mr James Smith Robinson, Mr Walter Reid, Mr Richardson, Mr Fenwick Richards, Capt. Rankin, Mrs Rankin, Mr H. L. Riseley, Mr W. J. Rogers, Mr Philip Rawle, Mr F. Robinson, Mr C. H. A. Robertson, Mr Ryland, Rev. H. D. Rawnsley, Mr D. Rootham, Mr W. S. Rawlings, Mr J. Roberts, Mr R. D. Robjent, Mr F. Richardson, Mr M. Randall, Mr R. Ridler.

Col. Savile, Mr C. Somerton, Mr William Sommerville, junior, Miss Stancomb, Miss Ada Stancomb, Mr G. L. Stothert, Mr W. W. Stoddart, Mr J. Scull, Mr W. C. Street, Mr J. Shute, Mr John Smith, Mr Willie Smith, Mr W. Swanson, Mr Swanson, junior, Mr A. C. Smith, Mr G. W. Skinner, Mr W. Summers, Mr Irwin Sharp, Mr J. Snow, Mr W. R. Stock, Mr G. J. Smith, Mr C. S. Sampson, Mr W. S. Stock, Mr E. C. Sampson, Mr E. E. Street, Mr S. Summers, Mr T. Scott, Mr G. A. Sowter, Captain Stamper.
The ceremony in the dock was of the briefest character. Mr. Charles Nash, in the absence of the Chairman of the Company, Mr. P. W. S. Miles, took the paddle box as a substitute for the chair, and asked the Mayor to declare the Dock open, which his Worship accordingly did, after the archdeacon of Bristol (the Rev. H. G. Randall,) had read the prayer of the church for the divine prevention and guidance.
The hearty cheering of the crowd as the vessel entered and left the Dock, showed that it was not so much a ceremony as the event that the citizens of Bristol rejoiced to witness.

On the return voyage of the Juno a few effective speeches of a congratulatory kind were made, the speakers being the Mayor, Mr. C. Nash, Mr. H. Dalrymple, Mr. W. Smith (the High Sheriff) Mr. P. Stewart Macliver, Mr. J. Brunlees, and Mr T. D. Taylor.

In the evening the officers of the Company, and a few other friends dined with the Mayor at the Merchants' Hall.

And so the day was celebrated which divided two eras in the history of Bristol commerce.
Since the River Avon existed before the city of Bristol, and the trade of the city would never have been formed without the river, it is only paying the Avon the compliment of a fitting recognition to give some prominence to its history. A clever, versified account of the tradition—the origin of which nobody can tell—of the formation of the most admired part of the river appeared some thirty years ago in "Bentley's Miscellany," and though historians certainly account for the name of St. Vincent's Rocks, by saying that at the Hotwells in the fourth century there was a chapel built to the memory of St. Vincent, the martyr of Valencia, and geologists have long decided that the course of the river was altered from its original course to a more southward one by volcanic action, the writer of the poem of the Twin Giants, Vincent and Goram, tells the story of the legend so well, that if it is not true it ought to be. The period during which the events recorded happened is conveniently fixed for "Earth's youngest day," when the two twin giants dwelt near where "dirty Sabrina to ocean descends."

The size of the giants was prodigious:

One might doubt if they ever were infants at all,
But if they were such, I would simply remark,
That to serve as their pap-boat a boat had been small,
And their cradle was little if less than the ark.
They'd have nursed the Colossus of Rhodes as a doll,
And perform'd a fit feat for mankind to admire—
As a humming-top using the dome of St. Paul,
Or have made it a peg-top with Salisbury spire.

One day when Vincent and Goram were sitting together
on the top of a hill, and the ichthyosaurus and plesiosaurus
"who afterwards turned into specimens for us," were enjoying the sunshine, Vincent, the more mentally brilliant of the two, suggested to his brother that they should do some great work that their names might not be forgotten. Goram proposed building a lofty tower, but Vincent met this with the objection that it would be considered merely a mark of personal pride.

"Let us hear your own plans, then," said Goram;
"No doubt thou art wiser than I."
But though he spoke thus with a view to decorum,
He thought it was telling a lie.

Vincent then proposed a plan designed to kill envy and strike malice dumb, and the following was accordingly the first river Avon scheme ever propounded.

"Behold this fair lake that outstretches so vast here,
And think what a rich soil the water conceals!
From numberless hills all the waters are cast here,
Which every new year makes it oilier than last year;
A bottomless bottom of mud is amass'd here;
And if we should drain it we form a fat pasture.
Besides—'tis worth heeding—
By such a proceeding
We gain an abundance of newts and of eels."
(The newts were the saurians renown'd in our song,
And the eels great sea monsters, three hundred feet long).
"Let us cleave them a passage just here through the rocks,
And win this fine pasture to fold in our flocks."
A discussion on ways and means followed, but a monster pickaxe was provided, and Vincent recommended that the brothers should work and tend their flocks alternately. Goram, however, objecting to the work, proposed that he should look after the flocks whilst Vincent went digging channels; and the other brother consenting, this plan was pursued for some time, and Goram devoted himself to the studying of culinary art on a large scale, or else doing nothing. At last he suffered from ennui, and after throwing a few rocks at Lundy Island, by way of a little gentle exercise, he made up his mind that he would make a canal too, like his industrious brother.

This plot conceived, he was not lax
To carry out his plan;
So he borrow’d the lean of Vincent’s axe,
   And without delay began.
At Vincent’s work he seem’d to scoff,
   Though he scarce had reason why;
So he chose a spot, some three miles off,
   Where his own canal should lie:
Which he meant should be better in every respect,
   Than that one which Vincent had thought to effect;
Wider and shorter, and sloped off more cunningly,
   That the waves of the lake should glide out through it runningly.

They worked by hourly turns, and watched their flocks (mammoths and krakens) when not canal making. In direct opposition to the principles of the Betting Act of later days they had a wager, inflicting on Vincent, if he should fail to do more work than his brother, the penalty of gathering bushes for their beds, and trees for firing, added to which he would undertake,
"The building, covering and maintaining,
The fencing, planting, watering, draining,
Of all our tenements and lands."

"And I," said Goram, "if I lose
(But that I don't intend or choose),
For ever will supply
A weekly tribute to your hand,
Of twelve fat mastodonta, and
A megatherium pie."

The difference between the two giants was seen in their modes of working. Vincent had all the instincts of a civil engineer, whilst Goram worked very hard whilst at his task, but with no very definite idea of how he was going to complete it. After a while he tired,

And thought with a sigh of the weekly pie
Which he rather would cook for himself than his brother."

He worked, by fits and starts, resting at other times in a great arm-chair that he hewed out of the rocks above the channel that he had already partly formed, whilst he cooled his feet in the stream; and the narrator of the story breaks off at this point, to ask his readers if they have ever roamed through the fair grounds at Blaize, and seen Goram's chair there, since there it is to be seen just as when fashioned by the lazy giant.

Now, it was the custom of each of these brothers, to save the time that would be spent in going from the scene of his work to that of the other, just to toss the axe over, giving a loud call of warning previously to doing so. And this practice led to a lamentable accident.
'Twas the month when mists begin
Over lake and land to spread;
Over tree and over brook,
Giving things a shadowy look
Like the regions of the dead,
When the air is free from din:
When the skies are grey and sober:
When the leaves turn red and umber,
And descending in thick number,
All the prattling streams encumber:
'Twas the month of "brown October."

It was very frosty and very foggy, so foggy indeed that early in the mornings the giants could not see their toes,

"And that which Goram took to be
At first the outline of a tree,
Proved a fungus on his nose."

Vincent still worked away with most exemplary devotion to duty, and one morning after an hour's work he hurled the pickaxe as usual

Through the air he heard it sounding,
Then its fall and its rebounding,
After which the whole surrounding atmosphere again grew still.

And he was much grieved at not hearing Goram going on with his work, and severely censured his brother's laziness. He listened for some time, and not hearing anything but the movements of snakes, crocodiles, and hippopotami,

"Rivers rippling in their flowing,
And far-off whales their noses blowing,"
he frowned angrily and stept over Durdham Down to pull his brother's ears, and arouse him from the slumber in which he supposed he was wrapped. The sequence is tragic:—

Why do Vincent's eyeballs glare
With a glance so wild and horrid?
Why doth Vincent tear his hair?
Why doth Vincent slap his forehead?
Why his teeth doth Vincent grate,
  Sounding like a prison gate?
Why a groan doth Vincent smother?
Signs of grief that knoweth no bar—
'Tis that he had slain his brother;
Slain his brother with a crowbar.

Poor Goram had indeed been sleeping peacefully before the descent of the crowbar on his head, and the manner in which his phrenology was spoiled is as follows:—

Yes, it came down in thunder,
Excited his "Wonder,"
Parted his "Firmness" quite asunder,
Injured his "Self-esteem" a little,
Cracked his "Hope," which before was brittle,
  Lessen'd his "Weight," and "Size,"
Changed his "Colour" and marr'd his "Form,"
Cool'd his large bump of "Aliment" just as 'twas warm,
  With the anticipation of morning victual;
Batter'd his "Order" quite out of its rank,
Reduced his "Number" (from one to a blank),
  Made the last of his "Language" start out at his eyes,
Alter'd all other organs less or more,
But left his "Wit" as it was before.

Vincent's grief was as extreme as anyone could expect, though he assured himself that the fatal act was not due to
any malice prepense, and that "the dent of the axe had been wholly an accident." He could not put his brother's brains back again, although he tried, and was comforted in his grief by a vision of a consoling nature, which, like a coroner's jury, exonerated him from all blame. Vincent's spirits revived, and after rejecting his first idea of digging a grave for his brother as taking up too much time,

He decided to throw both body and limb
Into the Severn sea,
Where they might sink, or where they might swim,
Just as the case might be.
If they should sink, the mud and the ooze
Would form a mound o'er them as fast as you choose,
If they should swim, they would float in the ocean;
And perhaps gain the prize for perpetual motion.

Full of the idea, Vincent stalked away to Kingsweston, and had a good look at the Severn. It was low tide at the time, and he thought that if he threw such a large body amid the shoals it would lie above water and look very unpleasant.

So he went again
To his brother's glen,
And brought great rocks and piled them together,
One upon t'other,
All over his brother,
And clay'd them to keep out the wind and wet weather.
Hence rose a mound,
Which is still renown'd,
Where rock and clay are mingled still:
Its eminent top with a lodge is crowned,
And Goram's grave is Penpole Hill.

The narrator also informs his readers that a large upright stone on the south of the hill is a splinter from Vincent's
axe, and a hole in the rock to the north of this spot is the socket of Goram's eye. As for Vincent, he soon returned to his work, keeping steadily at it until it was finished, but even then he could not get rid of remorse for the death of his brother, and did a great many arduous tasks to escape from bitter thoughts.

With such a view it was he threw
The stones together at Stanton Drew;
And ranged in rank, on Salisbury plain,
Those wondrous piles that yet remain,
Which have been the cause of a hundred and twenty queries,
And as many attempts to explain the mystery,
Being propounded by learned antiquaries,
Who never have met with this true history.
On Staffa's shore he lived awhile,
And form'd its cave with skill and care;
Then swam across to the Emerald Isle,
And built the Giant's Causeway there.

At last he fell ill, and coming back to the scene of his labour in the new course of the river, he looked with great contentment on the woods just beginning to grow—and then he died. Unfortunately he fell head foremost into the river, and would assuredly have dammed it up had it not been that it was a season of floods, and the extra amount of water carried the body along.

Until it came to the marshy place,
Where into the Severn its waters gush;
And there it met with a wider space,
Which, giving it vent, reduced its rush,
The giant was borne till the currents met,
And then kept still between the pair;
The Avon pushed him forward yet,
But the Severn as oft pushed him there.
The waters parting North and South,
Served mud around the corse to wash—
Whence came the bar at the river’s mouth,
By Bristowe’s mariners called the “Swash.”

The narrator then records with grief that merchants, sailors, and pleasure-seekers are in the habit of saying unkind things about Vincent for interfering with the passage of ships up the river, and he concludes with the exhortation—

But let Bristow’s merchants who wait for goods,
And the sea-sick wretches who come from Cork,
And the sailors, who left the girls of their hearts
In Limekiln Lane, or the neighbouring parts,
Look at Clifton’s rock, and the opposite woods,
And remember that Vincent’s work
Furnished them these, and the river also,
By which their vessels may come and go.
This thought should render impatience tame—
This thought should banish their fretful gloom—
Should make them venerate Vincent’s name,
And honour the “Swash” as Vincent’s tomb!

The cleft in the rocks made by the industrious Vincent was found so inconvenient to the dwellers on the high level, that Alderman Vick, “a wine merchant and a bachelor,” prosaically bequeathed to the Merchant Venturers a thousand pounds, which was to be put out at interest till it increased tenfold. Then the money was to be applied to building a bridge. A modern giant—one Brunel—was called in, and the chasm left by Vincent at Clifton was bridged over.
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"The best Spectacles are undoubtedly the Brazilian Pebbles; they are cooler to the eyes, besides not being so liable to be scratched or broken, and are preferable to all others."

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MARBLE CHIMNEY PIECES
WASHSTANDS, ETC.,
Slate Cisterns, Salting Troughs; Slate Shelves; Milk and Whey Coolers; Mangers, Urinals, Billiard Tables. Roll Ridging and Creese, Steps and Risers, Hearth Stones, Battens, Landings, &c.

EXTENSIVE SHOW ROOMS.

Large quantity of Bangor, Port Dinorwic and Portmadoc, and other Slates, Slate Slabs, &c., in Stock.

SLATING COMPLETE BY THE SQUARE.

SLATE WORKS,
PLAIN AND ENAMELLED IN ALL BRANCHES.

Depot for Writing Slates, framed or unframed.

Articles to order promptly executed.
Cotterell Brothers having attained a prominent position as HOUSE PAINTERS, DECORATORS, and CONTRACTORS, beg to thank their customers and the public for the patronage which their firm has enjoyed for many years.

This success they attribute to the following Maxims, which will continue to guide their business transactions - viz.

GOOD WORK, with unadulterated materials.
STEADY and trustworthy WORKMEN
UNIFORM SCALE of CHARGES, either by MEASUREMENT or ESTIMATE - And finally,
STRICT and COMPETENT supervision.

AND THE SUPPLY OF
PAPER HANGINGS,
CHEAP,
ELEGANT,
NEW.

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11, Clare Street, BRISTOL.

and 5, BRIDGE STREET, BATH.

THE ROCKS,” GLOUCESTERSHIRE.—We are informed that, under the instructions of J. E. Taylor, Esq., the present proprietor, the Messrs. Cotterell Brothers, of Bath and Bristol, are entrusted with much of the restoration and decoration of this ancient and noble residence, formerly the seat of Serjeant Wrangham. The drawing-room, which is said to be one of the finest in the country, will no doubt afford scope for the decorative taste of this well known firm.—Bristol Times and Mirror, January 2nd, 1869.
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MANUFACTURERS OF
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RIDDLES, SIEVES, FIRE-GUARDS, FENDERS,

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Flower Stands, Garden Arches, Bordering,

MEAT SAFES, DISH COVERS, &C. &C.

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OF WIRE GOODS.

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**EDWIN FEAR,**
Watch and Clock Manufacturer,
JEWELLER, &c.,

4, BRISTOL BRIDGE, BRISTOL.

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**EVERY WATCH WARRANTED.**

*A Large Assortment of bright and coloured Gold Albert Chains and Necklets.*

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**Price List of Electro-plated SPOONS and FORKS, warranted to wear well.**

**QUALITY.**

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A variety of Tea Services, Cruet Frames, Liqueur Frames, Toast Racks, Fish Carvers, Butter Knives, Pickle Forks, &c., at equally moderate prices.

**Importer of French and American Clocks.**

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1875 930 10 5 1056 5 11
1876 2581 18 3 3638 4 2

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(Mutual)

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Established, 1815.

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The Total Funds Exceed - - - - £6,500,000
The Annual Revenue Exceeds - - - - £800,000

By the Society's Mutual Constitution the entire Surplus or Profit realised, instead of going to swell the Dividends of Shareholders, is returned to the Members in the form of Bonus Additions to their policies,—the amount divided being ascertained every Seven Years, and the Additions made proportionate not only to the Sum originally Assured, but to previous Bonuses as well. By this method Members secure a

YEARLY INCREASING ASSURANCE

without any additional payment of Premium; and, while the old Members, who by survivance continue a long time contributing to the General Fund, receive Large Additions to their Policies, those who die young also obtain their fair Share of the Profits.

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ONE MILLION AND A QUARTER STERLING,

which yielded to all policies of Five Years' standing a

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A. H. Turnbull, Secretary.

West of England Branch Office—22, College Green, Bristol.

Joseph Mills, Resident Secretary.

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