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The Sea Power and Position

of

Great Britain at the present day.

Map of the British Isles.

Commerce Distribution Maps - #1 + 2

Maps of food supply of Great Britain

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Envelop 5.

1894

Year

No.

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Author:

Commander C. H. Stockton, U. S. N.

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The Sea Power & Position of Great
Britain at the Present Day

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Great Britain - Sea Power

The Sea Power and Position of Great Britain
at the present day.

Great Britain is by universal consent at the present time the first Naval power ~~of~~ the world. This is so, not merely by the strength of her Naval forces, but also by her geographical position, by the maritime character and strength of her people, by her great commerce, and by her possession of important strategical positions in every navigable sea of importance in the world.

To this Naval ascendancy is closely linked a commercial and financial supremacy that sustains and confirms her position as Mistress of the seas.

The mastery of the sea ^{of course} cannot be held by more than one country at a time. The predominance in Naval and commercial power from which ~~the~~ mastery follows has changed from time to time, but from the earliest ages there has been one power that has led in this respect and has held relatively the position now enjoyed by Great Britain.

The Mediterranean was the birth place of navigation; and supremacy in those land enclosed waters passed with comparative rapidity, in ancient times, from one country to another.

The Phoenicians were the first to attain such superiority and after ~~them~~ came the Greeks, the Carthaginians, Romans, Venetians and Genoese until the rounding of the Cape of Good Hope gave the greatest length of sea radius and commercial supremacy to the

Portuguese and ^{for the first time} ~~gave~~ the greatest sea power to a country outside of the Mediterranean ^{and to one} whose shores were washed by the ^{then} boundless Atlantic Ocean.

Spain by her discoveries and colonial conquest may be said to have succeeded Portugal in supremacy upon the sea, a supremacy found, rather than earned or maintained by strength, but ^{her} ~~the~~ supremacy suffered a shock, in due time, from the defeat of the Great Armada from which it never recovered and by the end of the 16th Century it was relegated to a secondary place.

As the Sea power of Spain declined, that of Holland and England, increased, and the Dutch in their turn became the leading Sea power of the world ^{from} ~~through~~ their commercial expansion ^{reaching as it} ~~as it did~~ ^{did} both ^{to} the East and West Indies. Its culmination came in middle of the 17th Century when the Dutch shipping exceeded that of all the rest of Europe put together.

England dates its importance as a Sea power from the time ^{of Drake} ~~the~~ Defeat of the "Invincible Armada". It has been well said that ^{just before} ~~at~~ the Defeat of the "Invincible Armada", whatever the maritime leanings of the English people were before ^{those times that} ~~that event~~, after it, England became unalterably a maritime Nation. In those days England was sufficiently large and fertile to produce the necessities of life for ^{her} ~~its~~ growing population. The defeat of the Armada ^{had} proved the difficulties in the way of invasion, ~~while~~ the proximity of Great Britain to the Continent was sufficient to ^{give} ~~enable~~ it to ~~have~~ easy commercial relations with the markets there. ^{While} ~~and~~ the climate, coasts, and conditions of sea and soil on and about

the British Isles were such as to compel skill and hardihood in the navigation of the waters, ^{As well as} ~~and~~ a life of labor upon the land.

The development of Sea power was gradual, and an ascendancy was not attained, until after a series of fights with the Dutch, the sturdiest opponents the English ever had ⁱⁿ ~~upon~~ European waters. This supremacy which came after the middle of the 17th Century- can be dated from the conclusion of the war with the Dutch in 1654, when after a bitter contest the Dutch by treaty acknowledged the British dominion of the Sea. But this dominion was not to remain undisturbed, it was closely contested by the French during the reign of Louis ~~XIV~~, once more also by Spain in 1739, and again and again with France, aided by Spain, until the great peace of 1763. During the wars preceding this peace the English had destroyed, or captured, over one hundred ships and had secured much territory abroad.

After ~~this~~ peace came an era of restless discovery and colonization, followed by our war for Independence, and with it war again for England, with France, Spain and Holland. After this contest, very close ^{Contested} ^{upon the sea} at times for England, came the wars of the French Revolution and Empire described in so masterly a manner by ~~the~~ former President of ^{the War} ~~this~~ College, ^{Capt. Mahan & finally} ~~in his recent volumes~~, and with the Battle of Trafalgar ^{serious} ceased any attempt by any Power to contest the supremacy of the Sea with the British Empire. — ✕ — ✕ — ✕ —

^{as we have heard already} The Sea is full of highways leading freely to all ^{Countries} ~~Nations~~

bordering ^{upon} the Ocean; highways always in order and in readiness

for ~~as~~ as means of approach, and of attack, by the ~~modern~~ Naval forces of any country.

It has ^{also} been broadly stated that three fourths of the world is directly dominated by the Sea, and indirectly it ~~can~~ be added that the civilized world is ^{more or less} controlled by the influences ^{that} the Ocean bears.

But though the territory, ^{the} Commerce, and ^{the} Naval forces ^{of a Country} ~~afloat~~ ^{afloat} ~~can~~ be reached more readily than ever by the Sea; the ~~means~~ ^{Creation of} of creating such Naval forces ^{is} ~~are~~ more difficult, the time for doing so more prolonged, ^{and} ~~while~~ the time for repelling such attacks by improvised material ^{alone} has gone by. An increasing time is needed for the preparation of ^{the} personnel and material, for ^{its} construction, organization, assemblage, and training. [I venture here to digress

and express the hope that it will be always borne in mind that all training, exercise, and instruction, must be as a means for an end, and that it should not be viewed as an end alone. We, young as we are, ^{in our service I fear those} have ~~also~~ ~~our~~ ~~Bombards~~, who forget that the Navy is created and exists for war, or otherwise it has no reason for existence; its police service being both minor and incidental.]

The principal conditions affecting the Sea Power of Nations are cogently given by Captain Mahan ^{has} in ~~his~~ earlier publication

~~upon the Influence of Sea Power upon History as follows~~

3 The principal Conditions affecting Seapower have been given by Capt. Mahan as -

- 1 - Geographical Position.
- 2 - Physical Conformation.
- 3 - Extent of Territory.
- 4 Number of Population.

5 - Character of the people.

6 - Character of the Government.

The strength of the British Empire, reaching over the *whole* world in its giant like grasp, emanates from the home territory of the British Isles.

This strength, due to its sea power, arises from England's superiority in the conditions just enumerated.

First of all from its ~~superiority due to its~~ insular position arises great advantages, from the fact that it is not required to defend itself by land, ~~its~~ defence against invasion being primarily a sea defence, which alone would compel the creation and sustenance of a Navy. Napoleon is quoted as having said that "with six days in command of the waters of the English Channel, on the fifth, I will be in London". Without this command, to be obtained alone from Naval superiority the thought of invasion could not be entertained.

The separation of the British Isles from the Continent of Europe removes ~~also~~ the ~~territory by conquest~~ ^{temptation to offer arising for an extension of} ~~the physical~~ ^{attraction by conquest of adjacent country.} ~~the physical~~ conformation of the British Isles, with its Estuaries, bays and ports; the proximity and accessibility of its towns and interior *country* to the sea; and the fact that its coast line being continuous, has not the disadvantage of a separation, like the ^{two} coasts of France or ~~those~~ ^{the two coasts} of the United States, ^{present} ~~presents~~ ^{Safely} decidedly favorable conditions ^{for concentrated} ~~for~~ ^{sea power}

The separation of Ireland from the otherwise compact United Kingdom is a feature of weakness in the physical conform-

ation, it retards ^{an assimilation} ~~a growth of homogeneity of~~ the population and by a severance of land communication makes Ireland an exposed territory to attack and ^{difficult to defend.} ~~adding to the difficulty of its defence.~~

History shows that ~~in later times~~ some of the most threatening demonstrations against ~~British rule~~ have been landings, actual or intended, upon the coast of Ireland. ~~[The Military objections against independence and Home Rule in Ireland seem to have reasonable foundations.]~~ This separation of Ireland, increasing the necessity for Naval force ^{in turn also} contributes to build up the sea power of England.

The extent of the territory of the British Empire has two bearings upon its Sea Power, one from the immense Sea coast and maritime region thus incorporated under the British flag, the other arising from the necessity of sea communication between the outlying territories, and from them to the home country, and to the markets of the world. To a very great degree the physical conformation of British Colonial territory is either insular or peninsular, ^{while} the lines of sea communications of Great Britain are estimated to be over 92,000 miles in length.

The population of Great Britain and Ireland is ~~now~~ ^{above} ~~40,000,000~~ ^{40,000,000} and to this number must be added the White populations of ^{such} the sea lined colonies ^{as} of Australia, ^{as} Canada, and ^{South Africa} Cape Colony amounting to ^{about 13,000,000} ~~about 12,000,000~~ souls. Here ^{then we find} ~~there are~~ 50,000,000 of a maritime race, in maritime countries, and this element of durable Sea power is still further strengthened by the White and sea going population of the East and West Indies.

The sea going character of a Nation whose mercantile marine has a tonnage of ~~over 134~~ ^{nearly 14} millions, out of ~~a possible 28~~ ^{About 28} millions, ^{in the world} and in whose trade is employed afloat over 24,000 persons of whom more than 17,000 are British ^{submits} requires no further showing. The commercial and colonizing instincts of the English have never had a parallel in the history of the world and are as active to day as in the past.

The character of the British Government is favorable to Sea power as ^{in addition to the} ~~which~~ comparative freedom ^{provided its} for the subjects, it has aimed steadily, perhaps ^{until late years} more instinctively, than ~~logically~~, for the command of the Sea and all that is thereupon carried. It is in close sympathy with all commercial extension, and its support of Sea activity by Sea strength has been continuous, powerful, and in the main successful.

The Strategical position of the British Isles and of the various possessions of Great Britain in the world is worthy of study. Let us first examine the position of this great Sea power in the Ocean and water area of the world.

Point out on map

The British Isles are placed upon the middle of the great Western face of Europe as it looks towards that Ocean ~~whose~~ whose mystery Columbus solved. Their position is such that the great and only Sea route between Northern and Southern Europe passes at the threshold of the isles and is dominated by their Naval power. The trade of the world reaches one of its central ^{axis} ~~points~~ in the North Sea close to the shores of England, ^{this include} as it passes through the Straits of Dover

and out of the Baltic, from the coasts of Norway and Sweden, and from the mouths of the Scheldt, the Meuse, the Rhine and the Thames ^{Centers} ~~meets together~~ in the southern portion of the North Sea. This area, with ^{all} the routes radiating therefrom, being commanded by Great Britain, as if they were ~~rivers and waters~~ ^{with} in her own boundaries.

The British Isles looking westward, faces British North America ~~looking eastward~~ across the North Atlantic and to clinch the ascendancy of England in this the most important, as well as oldest known of all oceans, is found Gibraltar in the Eastern half ^{of the Atlantic} ~~Halifax,~~ and Bermudas and the British Windward Islands in ^{its} ~~the~~ Western half.

The British with the great trade routes of the world converging in the ~~adjacent~~ ^{adjacent} waters to their islands, and with the Naval superiority existing and based upon their home ports, upon Gibraltar, Halifax, the Bermudas, St Lucia, and Jamaica, ^{have a silent} ~~control~~ ^{of} the North Atlantic Ocean even to our very harbor entrances.

^{My Reference} The great stretch of coast line of the United States upon the Western Atlantic gives us ^{from itself} no control of the Ocean which washes this coast. The extent of this coast line ^{and of} the inlets, ports or harbors that indent it, gives us nothing, even if all were fortified - without the Sea power which arises from the existence of sufficient and proper Naval force. Our Sea power ^{has been} ~~is~~ not only weak in the distant Pacific, but is ~~relatively weaker~~ ^{so weak} along the very centre of our Sea frontier, in the midst of our commerce and wealth and along the great artery of our coasting trade whose value and importance ^{are} ~~is~~ so little realized, ~~by us~~.

Our trade between the North and South, between the Atlantic and the Gulf, is under the control of light craft whose operations based upon the Bahamas would be backed by what England ^{would} ~~choose~~ to send from home.

Map
The ~~Med-~~ Atlantic from 20 deg. ^{Lat.} N to the Equator where so many trade routes cross is not beyond the reach of Gibraltar to the North East, or Sierra Leone to the South East.

Map
In the South Atlantic as it widens out below the Equator, there are to be found the British islands of Ascension and St Helena, and we come also before long within the sphere of the region of Cape Colony with its fortified anchorages at Capetown and Simon's Bay. The routes to and around the Cape of Good Hope are the ones more particularly covered ⁱⁿ ~~as~~ this Ocean and are the more valuable, though the Falkland Islands are not too far off to cover the Straits of Magellan and the route around Cape Horn.

The Indian Ocean has all of its entrances guarded by strategic points in the hands of the English, wisely and opportunely occupied by them. (Strategic work and Military strength has been fostered in time of peace, and bloodshed and perhaps war saved there by.

Map.
The Cape of Good Hope or rather the British possessions of South Africa extending from Walfisch Bay upon the west coast to Natal and beyond upon the east coast, with the Island of Mauritius covers the south-western entrance to the Indian Ocean while in the north-west the Suez Canal practically enters the Indian Ocean while

through the Strait of Bab-el-Mandeb at British Aden with Perim, under the same flag, not far off upon the other side of the entrance.

In the north-east is found Singapore which controls the *principal* route to China and Japan, in the Eastern centre, Torres Strait ~~is~~ is English on both of its shores with Thursday Island, a Naval coaling Station of the present and future in the middle of this water highway.

In the Northern Centre, India stretches down having at its very apex Ceylon, historic in the past, important in the future, a stepping stone upon the Easterly route and a source ^{from} where protection may come, ~~from~~ for both coasts of Hindustan.

In the South-east King George Sound in the south-western angle of the Australian Continent, affords magnificent anchorage for the Naval forces required to watch all that enters and leaves the Indian Ocean from this direction.

The Pacific Ocean (~~is discussed fully in other lectures~~) ^{which} has Sydney and Melbourne in its south-western portion, is balanced by Esquimault and Vancouver in the North-eastern angle, while Hong Kong fills the North-eastern portion and continues the route from ~~the Chusan group for the future & Wei-ha-wei for the present~~ ^{continues the chain} Singapore. In the South-east alone is a gap which is only imperfectly filled by the proximity of the Falkland Group.

Next
Going from the Oceans to the Seas let us notice first of all the Mediterranean, whose central position, has made it in the past of great value and whose importance ~~is~~ ^{is still without} at present ~~if anything~~ ^{greater than ever}. It re-unites the Indian Ocean and the Atlantic

Question to the old world.

upon the North and is consequently the direct route to the Indies from Europe and America and with its tributary waters touches ~~the~~ *some* possessions of every great power in the world save Germany and the United States, ~~also~~. At its very entrance is Gibraltar *(to which* ~~before long will doubtless be added other British territory,~~ while in the Centre and East are the islands of Malta and Cyprus. Guarding the other outlet from the Mediterranean besides Cyprus we find Alexandria and the Egyptian anomaly, and what are all these and the Suez Canal too if not English and English held.

The Red Sea has Suez and Aden at either entrance and is but the prolongation of the Canal with the proper outlet at the Strait of Bab-el-Mandeb and at Aden rather than at Suez.

The Baltic has been given ^{largely} over to Germany, its second en-
trance ~~will soon be~~ ^{is} by Canal, with Helgoland directly opposite the western end; ^{still} but Great Britain controls the entrances to the Baltic by its command of the North Sea as we said at the beginning.

The China Sea contains within its limits Strategic points in Borneo, Singapore and Hong Kong while ^{as mentioned before} the Chusan Islands looking towards the Yellow Sea and the Sea of Japan can and will be English whenever they are wanted.

It is and has been for years the policy of Great Britain to rely upon her Navy as a principal means of defence for the British Kingdom and Colonies and the same means is necessarily relied upon for the protection of the lines of communication between the Home Country and the Colonies as well as between the various groups

External control of Canal - single transit - established at one end from exterior

of Colonies.

It has been the policy to fortify the more important commercial ports at home and abroad, and the Naval and coaling Stations abroad ^{only}, so as to resist and repel sudden maritime attack, but after that comes the role of the fleet to assure protection by the Command of the Sea through the defeat or dispersion of the Enemy's forces. Fortunately for England the sound ideas so persistently put in force by St Vincent still prevails, that the enemys' fleet should be met at his own port and that the soundest plan is to make these ports the frontier lines and mask the forces therein contained, by an equal or superior force in all respects ready for action. But if the blockade should be evaded, and a blockade is none the less a blockade, though at times evaded, the defence of the Colonies is intended to be secured as just stated. For the carrying out of this Naval protection in the various Colonies and possessions, certain facilities for Docking, Coaling and refitting are needed by which the fleet ^{can be} kept in a state of efficiency. This leads to the establishment ~~of~~ various places of strategic value ~~of~~ ~~in position as~~ Naval and coaling Stations, and the instinctive grouping of the various possessions around these points for defence naturally follows. I will give what seems to my mind this grouping for Naval defence, and call attention to the natural lines of communications in connection with them.

The Groups of the Great British Empire may be named as follows,

- 1 - The British Isles.
- 2 - The Mediterranean and the Red Sea.
- 3- The Eastern portion of British America, including the
Great Lakes, and Bermudas.
- 4 - The West Indies.
- 5 - The West Coast of Africa, with Ascension and St Helena.
- 6 - The Cape Colony, South Africa, and Mauritius.
- 7 - Australia and the South-west Pacific.
- 8- British Columbia and the North-east Pacific.
- 9 - North-west Pacific, Hong kong and Malacca.
- 10 - India.

Map The principal lines of communication are

1st - To the Strait of Gibraltar thence through the Mediterranean to Malta, through the Suez Canal ~~and~~ ^{the Indian Ocean (at Aden)} the Red Sea. This is the modern steam route for the East Indies and Australia and telegraphic communication parallels it throughout. *Lisbon* being the only foreign break in the English control of the cable line -

The 2nd line of communication is across the North Atlantic Ocean to the North American British possessions and Bermuda. St John's in Newfoundland is ~~only~~ 1910 miles from the great Naval Dock-yard of Plymouth England. This line of communication ~~is~~ ~~is~~ ~~is~~ hardly necessary to state ^{is} also paralleled throughout by Cabled ~~lines~~ ^{telegraphically}.

The 3rd line of communication ^{diagonally} is across the North Atlantic from the Home Country to the West Indies. The West Indies is reached

by telegraph from England by ^{three} ~~two~~ routes, one via Madeira and Brazil, ^{one} ~~by Bermuda~~ and the other by the way of the United States. ~~It is in contemplation to extend the Bermuda line to the English West Indies in which case this line mainly for Military purposes would be entirely within English jurisdiction.~~ *The second is entirely within British jurisdiction.*

The 4th great line of communication is southward along and off the West coast of Africa by ~~Sierra~~ ^{Sierra Leone} to Cape Colony and then eastward to the Indian Ocean and Australia. There is a telegraphical Cable line to the Cape landing at various points on the African coast, ^{some} ~~not~~ English. ^{Ascension and St Helena are now} ~~Ascension and St Helena are not~~ in telegraphic communication with England. The Cable to Australia follows the Steamer route by the way of the Suez Canal. Mauritius has ~~now~~ ^{also} Cable communication.

The 5th great line of communication is from the Red Sea ^{+ Aden} across the Indian Ocean to India, Ceylon, Singapore, and Hong Kong with a ~~direct~~ ^{direct} route from Ceylon to Australia. There are several lines and routes of telegraph communication reaching India ~~and the extreme Orient.~~

The 6th line of communication is that furnished ^{by} after the completion of the Canadian Pacific R.R. by a continuation of the route to Halifax and the St Lawrence across the Dominion of Canada to Vancouver on Burrard Inlet, and from there ^{across} the Pacific to China and the East Indies a route which makes with the Suez Canal route three routes for men and mails to the East and Australia.

The telegraph follows this route only as far as Vancouver and Esquimalt though ~~telegraph and Steamer continuations are contemplated~~ ^{must be the English line}

China
~~both~~ to Australia and New Zealand. *And a cable to Australia is*

New ~~and~~ *and* -
 Let us now return to the island which contains within it
 its limits England, Scotland and Wales ^{and} which is the great source
 of the Sea power of the British Empire, the place where its Navy
 is created, fitted out and supplied, ~~and~~ the general base for all
 of its operations.

The fleet of England is constructed at home in the pri-
 vate Ship-building establishments of England and Scotland and from
 the Naval Dockyards of England and Wales. To these elements of
 Sea power which maintain their position and value alike in peace
 and war can be added the Naval Arsenals, ^{while} ~~and~~ in time of war great
 elements of strength are found in the fortified harbors and certain
 roadsteads so placed geographically ^a to be of strategical importance

The three great Dockyards and Naval Arsenals of Great
 Britain are all in England and are in the order of importance as
 follows, Portsmouth - Plymouth - and Chatham. To these can be
 added the smaller Dockyards and Arsenals. Sheerness, practically
 an appendage of Chatham, Pembroke in Milford Haven, Haulbowline
 in Queenstown Harbor, and Deptford, a provisioning Yard near Lon-
 don. *Map*

In addition to the anchorages near by these Dockyards
 which are naturally protected by fortifications there are Military
 harbors like Portland and Dover, the former available for a modern
 fleet, the latter a tidal harbor and open roadstead.

Portsmouth in the South of England is the most extensive

and important Dockyard of Great Britain having been a Naval Station for nearly 700 years. Besides being the great Naval arsenal of England it is with Spithead, its outer harbor, the headquarters and principal rendezvous of the ^{British} fleet.

Covering nearly 300 acres of land ^{this yard} ~~it~~ contains extensive ^{and locks} tidal and closed basins for fitting out and repair, ^{Sixteen} ~~various~~ excavated Dry-docks, great facilities for the construction and repair of vessels and machinery, adequate and well distributed hoisting apparatus, and a net work of railway, connecting all parts of the Docks and basins, with the railway systems of the United Kingdom in such a way that stores and material can be brought from any establishment or mine of Great Britain alongside a vessel under repair or construction. A coaling Station has been recently completed at this Yard which with a storage capacity for 50000 tons of coal has most extensive hydraulic facilities in the way of cranes and hoists for receiving and discharging coal both by land and water; each hoist alone loading at the rate of 500 tons an hour. ~~These~~ facilities however on account of the restricted space and depth of water are only available ^{at the wharves} ~~alongside~~ for Cruisers and comparatively small ironclads. Battle Ships have their coal brought alongside in lighters, bagged for convenient ~~handling~~.

Besides an Ordnance Yard there are victualling, gunnery, and Torpedo Establishments at Portsmouth and ample Hospital and barrack accommodations.

Portsmouth has the disadvantage of being a tidal harbor

there being a least depth of from 19 to 21 feet upon the inner bar at low water, and from 23 to 26 feet, on the outer bar at the same stage of tide, with a rise and fall of tide averaging about 9 feet. 24 feet can be taken alongside the Dock Yard front.

And This disadvantage requires the use of Spithead as a customary anchorage ^{and place of final reception of stores} for vessels of great draught. Spithead is more of a roadstead than harbor, but its situation gives it great strategic value, to which is added
 great extent of anchorage room, two entrances, and of course the great Dockyard.

The adjoining Estuaries of the Solent and Southampton Water, give continuous and practically unlimited anchorage space. Spithead is very well placed with respect to the English Channel, the Straits of Dover and the North Sea and it is but 70 miles from Cherbourg upon the opposite side. The central position of Spithead with its defences and resources make it the greatest Naval Station of the world and the great Naval fortress of England ^{for} protecting all the home territory and waters of Great Britain.

At Plymouth, or rather Devonport, is the second great Dock-Yard and Naval Arsenal of Great Britain. With it is incorporated the Steam factory and Yard at Keyham and the Royal William Victualling Yard. The situation of Plymouth in south-west England looks out towards the Atlantic Ocean and it bears a close relation as a base of supplies and fits for any operations covering and protecting the waters of St George's Channel, and the Irish Sea and coasts.

It is the nearest English Naval Station to Brest in France which is distant about 126 miles.

Plymouth Sound and Harbor taken together form a fine body of water for large vessels. Depth of water and the security of a harbor is found off the town and Dock-yard ^{and} in the Hamoaze, the space though restricted is available at all tides while in the Sound is found extensive anchorage ground, protected by the great breakwater and accessible to the Sea.

The Dock-yard at Devonport with that at Keyham, contains accessible water frontage, several basins, ^{Eleven} ~~eight~~ excavated Dry-docks, large workshops, building slips, and ample facilities for repair and outfit. Like Portsmouth and Spithead, Plymouth Harbor and Sound are well protected by fortifications.

Chatham upon the River Medway in south-eastern England ^{but little smaller than Plymouth} is the third great Dock-yard of Great Britain, and unlike the others is situated at some little distance from the Sea upon a stream - ^{the Medway} - which ^{empties} into the great estuary known under the name of the "River Thames Entrance" at the historical and great readstead known as "The Nore". The Medway from its position leads directly to rear of the country about London and requires Naval as well as other defences, which at the same time cover the Chatham Dock-yard and to a less extent that of Sheerness at the mouth of the Medway.

Chatham and ~~Sheerness~~ from their positions, practically at the mouth of the Thames River, are the sources from which the Naval defences (and external protection of that river, and London) would ^{draw its} supplies of men and material, and ^{to which they would} resort for docking, repair, and

refit. Besides that exterior defence it has great importance and strategic value from its proximity to the inner end of the Strait of Dover and to the North Sea with its great Naval Harbors of Dunkirk in France, Antwerp in Belgium, and Wilhelmshaven in Germany not to speak of the natural and artificial entrances to the Baltic waters.

Containing an area of 500 acres, only partially developed, with great water front due to the bend of the river, and placed at a distance of about eight miles from the ^{Mouth}~~shore~~, upon a river so lined with ^{forts} and torpedo Stations as to be almost unassailable, and supplemented ^{aid} by Sheerness, it is likely to be the greatest Naval Station of the Kingdom. The difficulties of the Navigation of the river are being rapidly remedied and the Thames presents unlimited anchorage ground. ^{to} Adding the ^{five} Dry Docks at Sheerness and ^{ten}~~nine~~ at Chatham, can be added in time of war all of the great Docking and repairing facilities of the port of London. No dock-yard ^{I believe} ~~that I know of~~ has better hoisting facilities, with cranes and sheers more than twenty five in number, ranging ~~in hoisting capacity~~ from 5 to 250 tons in lifting capacity. Railways extend along the water front, docks, and basins, connecting with the London, Chatham and Dover Railway outside of the walls.

The Yard at Sheerness 50 acres in extent is on an island at the mouth of the Medway and directly at the Little Nore, and its position though exposed is valuable.

Pembroke, a building yard at Milford Haven in Wales, and

the Dock-yard at Haulbowline in Queenstown Harbor, are of less value as Dock-yards though the harbors upon which they are placed are fortified and are Military harbors for refuge and ^{of} strategic importance.

Milford Haven has a commanding situation with respect to St Georges' Channel and the Irish Sea, and besides being well placed towards the East coast of Ireland, covers the great port of Liverpool.

Queenstown with its two government ~~and~~ several private Dry Docks, has also excellent public and private facilities for repairs to hulls and machinery, it is well fortified and could excellently serve ~~as~~ one end of a line of patrols and scouts, the other end resting upon Milford Haven. It covers both coasts of Ireland and is the nearest Naval port in home territory to our shores and Halifax.

Besides the valuable Military and strategical harbors just mentioned at Spithead, Sheerness, Plymouth Sound, Milford Haven, and Queenstown, there is the strongly fortified coaling Station and harbor of refuge at Portland, in Southern England, made secure by its great breakwater a mile and a half long. The coaling facilities and plant at the Dock-yard at Portsmouth are ~~to be~~ duplicated here. This harbor is nearly midway between Portsmouth and Plymouth is fifty-two miles from the Channel Islands, and but a little over sixty from Cherbourg. As a rendezvous, a coaling Station, and anchorage for a fleet watching the English Channel, the

French coast, the Strait of Dover and the great trade routes converging in the British waters, it is of the greatest importance as a strategic harbor for Great Britain. ~~Harbour of Dover - France~~

~~Remains of the old Roman port of Dover~~

Besides the harbors just mentioned there are roadsteads and anchorages, not fortified, and more or less exposed to sea and wind whose positions make them of value to a sea going fleet fully equipped for sea and for fighting. These are the anchorages at the Downs, between Goodwin Sands and the main coast; at the mouths of the Thames and the Humber; Yarmouth Roads; and the Firth of Forth, on the eastern coast.

In addition to these there are anchorages of value at Torbay, Falmouth, and Mounts Bay at Penzance, on the South coast, Milford Haven, Luce Bay and the Forth of Clyde on the West coast, and Kingstown, Belfast Lough, Lough Foyle, Blacksod Bay, the mouth of the Shannon and Behavehen in Bantry Bay on the coast of Ireland.

The British Isles being found secure, and commanding with its fleet based upon its home ports ~~with respect to~~ the Baltic and the west face of Europe, let us now examine its position in the Mediterranean. At the entrance to this Sea which here has a width of $12\frac{1}{2}$ miles only is placed Gibraltar. Its value in the past we all know, arising not from its command of the Strait, but from its value as a base, refuge, and place of refit for the Naval forces that did command the Strait. To that harbor of refuge the Rock of Gibraltar with its 2000 guns ^{and garrison of 12,000 men} gave security and defence.

Since the time of steam propulsion its value has become ^{enhanced being} a station

for coaling, both for the Naval and Mercantile marine. More than 1000 tons of coal a day ^{are} handled at this port ^{in ordinary times,} throughout the year.

Its convenient distance from England upon one side, and Malta upon the other (about 1000 miles each) gives it a peculiar value in that respect. Of late years the question of the tenability of the harbor and anchorage under fire from the Spanish territory has been much discussed. It is claimed that modern ordnance from Algiers ~~and~~ and the heights about San Roque in case of war with Spain will make the harbor insecure for vessels at anchor; this anchorage which alone gives value to Gibraltar and for which the fortifications exist. This problem can be solved in two ways. - Either by the occupation of the entire shore line and hills of Gibraltar Bay in case of war - by the English - or by the acquisition of the Bay and country about Tangiers ^{in Africa} and its use for the same purpose that Gibraltar now fills with ^a freedom from hostile domination over the Bay. ~~The recently constructed artificial harbor and 3000 docks at Gibraltar look to a retention and development here in the future.~~ Apparently England is looking towards the latter way.

Malta is the next stepping stone en-route to the Indies, about mid-way between Gibraltar and the Suez Canal, it is the most important possession of the English in the Mediterranean, both intrinsically of itself and from its position in the sea. Malta however is linked in that co-operative way with the Navy which gives value alone to all insular and detached maritime positions.

It gives resources, strength and command to the Navy and mercantile marine but without Naval predominance and power it would be worth little in a strategic way.

Its position and local strength plus this power makes it one of the ~~few~~ great strongholds of the world. It is placed midway in the Mediterranean at a point between the Eastern and Western basins, in close proximity to the Strait of Messina, the Coast of Italy and the Adriatic. It possesses on either side of Valetta two fine harbors in one of which is an extensive Naval Establishment, the headquarters of the British Navy in the Mediterranean. Strongly fortified and garrisoned with four graving docks, shears of 160 tons capacity, and extensive repair shops it fills all the necessities that would arise in an ordinary war.

good
harbor & naval facilities it
Cyprus in the Levant ^{is} well placed but not well fortified *or with*
covers the entrance to the Suez Canal, and in fact all of the North shore of Egypt. ~~It controls the Mediterranean terminus of any overland route to India by the way of the valley of the Euphrates and the Persian Gulf and stands as a check to Russian if she emerges from the Black Sea through the Bosphorus and Dardanelles into the Mediterranean.~~

Cyprus
With the command of the Sea in the hands of the English ~~is~~ is of great service for operations against Egypt and the Grecian Archipelago, without the command of the Sea it would be of little use to anybody.

Egypt is garrisoned and occupied by English forces and is governed by Englishmen through the Khedive and his native ministry. In this way Great Britain commands both by land and Sea to the Suez Canal and the overland routes through Egypt to the Red Sea and the East. Port Said and Suez are the terminal points of the

Canal but the Canal is really watched and guarded by external points like Cyprus and Alexandria on the Mediterranean and Aden and Perim at the southern entrance to the Red Sea. The control of the inner entrances and sections of the ^{or any} Canal means little if the outer doorways can be closed by hostile hands, so Great Britain maintains her control of the Canal mainly and normally from the outside.

Strategically covered then at both ends the long water defile which includes the Red Sea and the Canal is in time of war and peace an English Strait. *John Masefield*

The English power upon the Mediterranean waters is now predominant not by the multiplicity or extent of its possessions or Coast line but by its Naval and commercial supremacy based as it is upon a few well chosen points ^{upon} and ^{sea} great trade.

France by its occupation of Algiers and Tunis, and by its Naval concentration at Toulon and recent extensive development at Biserta ^{in Tunis}, and by its concentration steadily going on of Naval strength in the Mediterranean seems disposed to contest with England the supremacy in this Sea. But less than four days steaming ought to bring the Channel Squadron to help the Mediterranean ^{forces} with sufficient force left to mask the reduced French forces in Brest and Cherbourg. ^{behind} As to an alliance with Italy it may well be a question whether England would be wise to add to the imperative duties of defence and protection to her trade and communications, as well as to her food supply and her Colonies; the duties of an entangling alliance.

The examination made in other lectures of the strategic features of the West Indies and Caribbean Sea and the Pacific Ocean will disclose more in detail the strength of the English position and ^{not} it is I think necessary to make other reference than that already made of the bases upon which the Sea power of Great Britain rests in the East Indies, North America and the African Coasts. Let us then return to the home bases and examine the worked and unworked material resources held in readiness by England to maintain her Sea power and by means of the personnel to carry out her will.

England is rich in the raw materials of coal and iron, in ship-building and manufacturing resources, in ships, guns, and seamen.

The United Kingdom produced alone in 1898 ^{over 202 millions} ~~over 125 millions~~ of tons of coal ^{about} ~~more than~~ one third of the world's supply. The

United States is the only nation approaching Great Britain in this respect, her production in 1898 ^{given as about 186 millions} ~~being over 125 millions~~ of tons. (Checked board)

The output of pig iron in Great Britain in 1891 amounted to over 7 millions of tons, exceeded somewhat and only by the United States.

A depression now exists in Ship building but in 1898 ^{about 600 nearly 700} ~~there were nearly 1100 vessels~~ ^{exclusive of war ships} built in the United Kingdom representing ^{over 1,000,000 tons} ~~nearly 255,000~~ tons of shipping, the places in order of ship-building importance being, the ports of the River ^{Clyde, Sunderland} ~~Tyne~~, the ports of the River ^{and ports on the Tees} ~~Clyde~~, Sunderland, Belfast, Liverpool and London.

There are also the well known armor manufactories at Sheffield

The Navy of Great Britain by a parliamentary
 estimate being issued consists of vessels built &
 building as follows

	Same class	70	to	16	of	H.S.
Armored Cruisers		31	to	5	of	"
Protected "		116	to	21	of	"
Unprotected "		15	to	6	of	"
Anti-submarine vessels armed		13	to	20	of	"
Torpedo vessels		35	to	none	of	"
T.B. Destroyers		108	to	20	of	"
T.B. -		95	to	30	of	"

By a study made by Staff of the
 Iron Works the Naval Power in order of strength the
 rank as follows

- 1 - Great Britain
- 2 - France
- 3 - Russia
- 4 - Germany
- 5 - United States
- 6 - Italy
- 7 - Japan

and the Ordnance factory at ^{Ship yards} El^Swick of Armstrong in addition to Woolwich.

The British Navy consists of ^{with} ^{in 1900} ^{Twenty nine} ^{three} ~~twenty~~ battle ships of the 21 ^{1st} ~~1st~~ class, 45 ^{2nd} ~~2nd~~ class and 26 ^{3rd} ~~3rd~~ class. ~~1st class of 9500 tons and upwards, not more than ten years old, of~~ ^{crusiers} ~~and 92 torpedo boat destroyers all new and~~ ^{not less than 13 knots continuous sea speed and carrying guns of} ~~not less than 13 knots continuous sea speed and carrying guns of~~ ^{built since 1889 and available for foreign service} ~~10 inches in calibre. Six of these are yet under construction.~~

There are twelve battle ships of the second class of 8500 tons and upwards, not more than 21 years old, and not less than 11 knots continuous sea speed.

There are eleven battle ships of the third class of 6000 tons and upwards, not more than 27 years old, and not less than 11 knots continuous sea speed.

In addition to these 43 battle ships there are fifteen armored vessels of the fourth class that are for local or harbor defence and 19 armored cruisers, seven of them former broadside ^{now} ironclads to be fitted with modern machinery and armament.

These armored cruisers have a tonnage ranging from 5390 to over 10780 tons. This makes ^{in all} ~~30~~ serviceable armored vessels some of

which are upwards of 14000 tons in displacement. ^{to which may be added others authorized or 86 in all}

Of unarmored vessels Great Britain has the following in the Imperial Navy, either afloat or under construction.

109 Cruisers of all classes from 1400 to 9000 tons.

21 Sloops from 925 to 1170 tons.

47 1st class torpedo Gunboats from 525 to 1070 tons.

21 2nd class Gunboats from 430 to 715 tons.

Personnel of British Navy consists
of 118 640 Officers, men, boys &
males.

Battleships have reached the
tonnage of 14 700 & a speed of
18 knots & displacement 12 000
46 in - Formidable class

Armored Cruisers 14 100 tons
23 knots - 9.2 in. guns
Drake class

The mobilization for last year com-
menced on July 11th & was completed
the following day without the slightest
hitch & without unduly depleting the
reserves at the naval depots in men or
material - Despite some ratings were found
I was most happy to be at the dock
trials & leave the morning. Wireless tele-
graph was used at a distance of 50 miles -

besides a number of gun vessels, surveying vessels, torpedo depot ships, torpedo rams, dispatch vessels, Yachts, transport and store ships, river gun boats and harbor and coastguard service vessels.
or 235 unarmored vessels in all.

Finally there are 170 torpedo boats of various classes ranging from 11 to 137 tons displacement. To realize the Naval creating power of ~~Naval~~ Great Britain one must bear in mind that the ^{Naval} Defence Act of 1889 ^{alone} authorized ~~ed~~ a number of vessels which, as has been ^{well} said, would have converted at one stroke a State without a Navy into a 2nd class Naval power

This Act authorized the construction of 8-1st class battle Ships, 2-2nd class battle Ships, 9-1st class Cruisers, 29-2nd class Cruisers, 4-3rd class Cruisers and 18-1st class torpedo gunboats, seventy vessels in all.

In addition to these vessels there are about 100000 men and boys, British and foreign, in the Navy, and about 100000 men and boys, British and foreign, in the Royal Marines.
The Officers, Seamen, boys, coastguard and Royal Marines in the Navy reached ~~74100~~ ^{over 110000 persons} in number, while the expenditure for all

~~of the Service amounts to a grand total of over 71 millions of dollars.~~
See Chap. 10, "The Navy of Cruisers" that the British Navy should have an enormous force of Cruisers is admitted on all sides. We have almost 1000

Having thus reviewed the Sea power of Great Britain founded upon a Commerce which reaches every part of the world, let us close by ^a review ^{of} the bearings of that Sea Power towards the United States.

Originally English Colonies, and of English origin, the ~~the~~ trade and other relations between the United States and Great Britain have been from the first very close. At the same time there is no Nation in the world with whom we have had more controversy and towards whom at times there has been displayed more

Let me quote ^{here} from an ~~old~~ work ~~to be found~~
~~in the library~~ by Mr. Jos L. Harris devoted
to the discussion of the heat affair. In speaking
of our relations with Great Britain, he says

" There has probably never been a time, however brief, in the
history of the United States when absolutely no cause of difference
existed between the two nations. ~~At~~ the present date (1895) one
hundred seven presidential messages reviewing the state of the
country have been submitted to the American congress at the opening
of its regular sessions. It is a significant fact that seventy-eight
of these messages--almost three-fourths of them--have called the at-
tention of congress to difficulties of more or less importance with
Great Britain. To the seventy-eight messages of the latter class
every president has contributed except Garfield, Taylor, and William
Henry Harrison. "

^{among other matters} Since 1895, there has been ^{late} the Venezuela affair, ~~now~~ in arbitra-
tion at Paris, and the affairs covered by the ^{present} Anglo-American Commission
headed by the late ~~lamented~~ Lord Herschell ^{which includes}
the Mexican boundary dispute

bitterness of spirit. ^{of the three great} The only ~~two great~~ foreign wars we ^{have} ~~ever~~ had were ^{it} with Great Britain and no matter how much ~~greater~~ cause we have had for complaint from other powers no fancied or real indignity has been more deeply resented than ~~one~~ proceeding from ^{the mother country} ~~Great~~ Britain. A quick, though ~~perhaps~~ not universal, sympathy has always arisen with those in antagonism to the British Government and a successful rivalry in ~~trade~~ and manufacture with England is always possible and ~~desired~~ ^{desirable}.

After all this has been said, however there is no country with whom we have closer relationship, greater congenialty and more identity in early history, in traditions, in religion, in tastes ^{and literature} and in language ^{than} with the British people.

The large emigration coming of late years from Germany, the Scandinavian countries, Italy, Hungary, and Russia, and the absorption of Latin Communities like those of Louisiana and New Mexico have not changed the Anglo-Saxon nature of the Republic nor ^{almost complete} the universality of the common law and language.

And yet history cannot be lost sight of, brothers engage in war bitterly- as in our Civil War and cousins as in our Revolutionary War and that of 1812.

^{Add quotation from Mrs. L. Harris as to}
We all believe in righteous war, none of us in unrighteous warfare, and I think I can say safely that the United States, made independent ^{by} ~~States~~ by the Revolutionary War against Great Britain, only became a coherent nationality entitled to respect after the war of 1812.

England is a great manufacturing and Commercial country.

The United States is a great manufacturing country whose Commerce though very great is carried on almost entirely by Great Britain.

It is stated by ^{U.S.} The Bureau of Statistics of the Treasury Department ^{in its annual reports} ~~that by comparison of~~ the values of the foreign Commerce (general imports and exports of merchandise) of the leading commercial nations of the world, it is found that the United Kingdom of Great Britain and Ireland stands first. ~~Germany second the~~ ^{in 1893} ~~United States third and France fourth~~ ^{the United States and Germany are almost equal in} in value of foreign commerce, ^{their}

including our imports and exports but not the combined values of the intransit" trade was ^{our} \$1,779,357,615. ~~\$1,557,680,610.~~ In 1893 the foreign trade

of Great Britain was nearly twice as much. ^{The Bureau of Foreign Commerce in the State Dept. states that} ~~the sum of the imports of the U.S. in 1893 was only less than the world in 1897 but was nearly~~ ^{the sum of the imports of the U.S. in 1893 was only less than the world in 1897 but was nearly} the tonnage of vessels engaged in the foreign trade en-
^{the sum of the imports of the U.S. in 1893 was only less than the world in 1897 but was nearly} tering seaports of the United States during the year 1893 was over

16 millions, of this tonnage 79 per ct was under a foreign flag.

Of all the countries of the world with which the United Kingdom does trade, the United States leads in exports to Great Britain and imports from the United Kingdom; the imports from the United States being over ^{three times} ~~twice~~ the amount exported to the United States, and ^{over three times} ~~twice~~ the amount in value of the imports from any other country or colony.

In the same way only ^{to} a much larger proportion ^{of} our trade with Great Britain is the largest ^{that we have with} ~~with~~ any foreign country, amounting in extent of exports to nearly fifty per centum for the British Isles alone. (The mention of this state of trade between the two countries shows how ^{great is the bond now} ~~much of a~~ line exist^{ing} between the two

countries.)

But no account of the Sea power of Great Britain would be complete without the mention of one weak point in the present condition of the British Isles which while binding her to this country and to her Colonies also compels her to keep her Sea power in the highest state of efficiency and in full strength, that is

her inability to supply her own population with food. *This alone puts Great Britain in any Great Naval War primarily upon the defensive*

Of the foodstuffs supplied to the inhabitants of the British Isles about one half ^(55 per cent) comes from abroad. In round numbers 185 millions of pounds is spent for this foreign supply ^{annually} nearly equal in amount to the War indemnity paid by France to Germany in 1871. Of this amount but 30 millions of pounds goes to the Colonies

Of this foodstuff brought from abroad,

The United States furnish

27 per cent of the wheat

75 per cent of the flour

60 per cent of the corn

66 per cent of the live oxen

90 per cent of the bacon and hams

87 per cent of the fresh beef

45 per cent of the cheese

25 per cent of the salt fish

80 per cent of the preserved meats

and nearly all of the oatmeal, lard and salt beef.

It is not of course impossible for Great Britain to se-

Sea power

Chart

Granaries proposed

Corn in wheat

cure her supply of foodstuffs from elsewhere, ^{her} wheat from India and Canada, Meats from Australia and New Zealand and the Continent of Europe, but the wrench and inconvenience that would result from the change is evident.

but diminishing The exportations of the United States are to a ^{great} ~~preponderating~~ degree raw, and partially crude materials while those from Great Britain are mainly manufactured articles. Thus to a great extent one country supplements the other. This ~~to an extent~~ is changing and herein lies the prospects of antagonism in the future.

Great Britain is the great manufacturing country of the world and measuring her productions by the coal used per capita we find in 1888 it was 4.53 tons per head, while that of the United States the same year was but 2.30 tons per capita. But the percentage of increase in this respect was an evidence of our ^{rapid} growth of manufactures as it was 420 per ct, while that of the United Kingdom was but 62 per ct.

Nations like individuals are governed by their interests -

When the overproduction of this country is relieved by free commerce and lower prices, ^{or has begun} a rivalry will begin with Great Britain for the markets of the world; a rivalry carried on upon that element ^{which is} free to all countries - the Sea - and where the skill, enterprise, and ingenuity of the American so successful upon land ^{can} ~~will~~ in my estimation be equally successful upon the water. The leading manufactured articles of British export are cotton and woollen manufactures, manufactures of iron and steel, Machinery, wearing apparel, and silks and linens. These articles of ~~manufac~~ *are products also of the United States*

~~these are not unknown to us and it is not unreasonable to suppose with~~

~~tures are not unknown to us and it is not unreasonable that with~~
~~the improvements in quality and price, likely to come in the future,~~
And at any time an active rivalry ~~will~~ ^{may} begin and ^{thus} a commercial attack made upon the
 most vital interests of Great Britain.

The United States
 That the carrying trade of ~~this Commercial Nation~~ will be
 continued to be placed in the hands of a rival foreign country
 I cannot believe and an active ^{Competition} ~~rivalry~~ in that respect can be also
 anticipated for the future. If there is not a virtual union of the
 two great English speaking Nations of the world in store for us ^{as we all hope} ~~in~~
~~the future~~ there is I believe then to be a rivalry, competition
 and antagonism between them. *Naval Union - Naval Subordination*

The English hold with respect to the United States a
^{Sea} great predominance in the waters that wash the ^{of the United States} ~~shores~~ ^{upon}
 the Atlantic and Gulf.

This predominance arises from the superiority of their
 Naval power based as it is upon a sufficient number of strategic
 points sufficiently fortified and provided with ^{Naval} facilities. These
 points are ⁽¹⁾ Halifax near our north-eastern and New England frontier
 protecting the St Lawrence and the maritime ~~Provinces~~ and aggressive
 towards ^{the North Eastern} ~~that~~ portion of the United States, Halifax is but 500 miles
 from New York, forty-two hours steaming by a fleet at 12 knots an
 hour will seal up New York for commercial uses and the producers ^{+ exporters}
 of grain ^{+ food stuffs} in the West will then learn ⁱⁿ what relation they ^{stand} ~~bear~~ to a
 Navy. Halifax it is true is part of the Continent and is subject
 to a land attack, but though not insular, it is peninsular to such
 an extent that it has insular conditions. ^{many} ~~of~~ *defense & isolation*.

Bermuda comes next about 600 miles from New York, nearly the same distance from the Capes of the Chesapeake, the entrance to so much ^{that} is of political, Naval and commercial value to the United States

These strategic places cover the most valuable part of our Coast, and Jamaica less than 1000 miles from the Mississippi ^{And our new West Indian possessions.} also reaches Galveston and its growing trade, (Esquimaux reaches equally well our Pacific coast line.)

Nothing can relieve us from the toils of England when she chooses to weave them around us but a Naval fleet upon both coasts equal to what England can spare from the defence of her own ^{+ colonies} shores, ^{her} from ^{in Europe} traditional enemies, and for the protection of her trade and trade communications upon the Sea. That this ^{available} portion of her Naval force ^{greatly} ~~will~~ exceeds in number and character of vessels our present Naval strength ^{or that ~~body~~ of the immediate future} is without question.