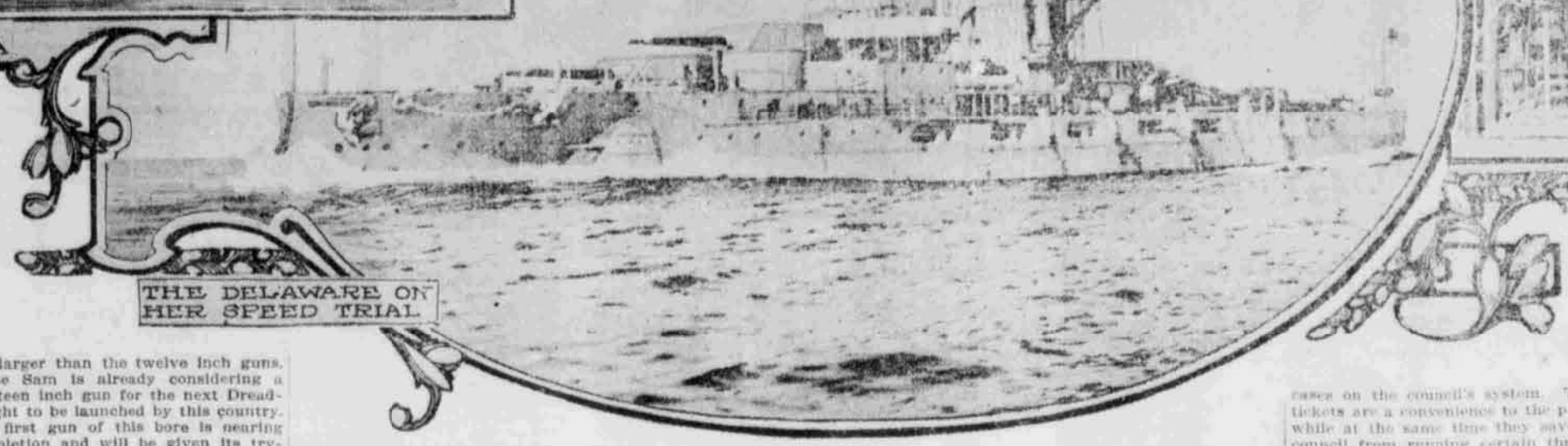
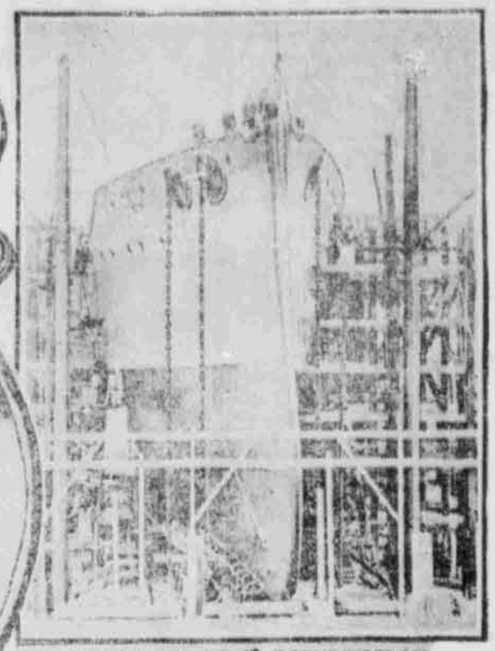
UNCLE SAM IN THE DREADNOUGHT RACE

BATTLESHIP NORTH DAKOTA



THE DELAWARE ON HER SPEED TRIAL



H.M.S. NEPTUNE

IT is a race for Dreadnoughts. The competitors are Great Britain, Germany, America, France, Japan and Brazil. A dozen is the product of the last five months, and more are coming.

The Delaware, the first of the United States Dreadnought type completed, made her trial trip Oct. 23 over the measured mile course in Penobscot bay, Maine, and exceeded her speed requirements on her screw standardization runs. The contract called for 21 knots an hour.

The Delaware attained a maximum of 21.567 knots an hour, with an indicated horsepower of her main engines of 28,578. The North Dakota is of the same class as the Delaware. Both of these Dreadnoughts are ready to take their place in the American navy. Each has a tonnage of 20,000.

The Utah and Florida, now building, are twin Dreadnoughts of 21,500 tons each and will carry ten twelve-inch guns each. The former is being built at the New York navy yard, the latter at the New York Shipbrilding company's yards.

In addition to these congress made appropriation for the construction of two battleships of 26,000 tons each. These have not yet been laid down, but they are to be called Arkansas and Wyoming respectively.

With the Utah, Florida, Arkansas and Wyoming completed, the United States will have six Dreadnoughts, and these will give Uncle Sam a standing among the sea fighting nations of the earth.

Great Britain has eight in the Dreadnought class; Germany, six; France is constructing the Mirabeau, a monster is the class now in demand, and Japan is building two in addition to those she has of 20,500 tons each.

The Delaware was built by the Newport News Shipbuilding and Drydock company and the North Dakota at the Fore River shipyards at Quincy, Mass. Both were laid down in 1907. Within the next six months these Dreadnoughts will take their places at the head of the nation's line of sea fighters. Each is in excess by 4,000 tons of the Michigan, which until the Delaware and North Dakota took the water was the most powerful of the American fleet. In addition to their great displacement and high speed the Delaware and North Dakota are 25 per cent stronger on the offense and defense than any battleships yet constructed. Their broadside batteries can hurl 25 per cent more metal than any ships in their class, while the vitals are protected by heavier armor than any battleships afloat.

While the most formidable Dreadnoughts of the old world carry nothing larger than the twelve inch guns, Uncle Sam is already considering a fourteen inch gun for the next Dreadnought to be launched by this country. The first gun of this bore is nearing completion and will be given its tryout at the proving grounds next spring. It will weigh sixty-seven tons, only seven tons heavier than the twelve inch. The velocity of a shell fired from this monster will be slightly less than that of the twelve inch gun, but it will make up in weight and will have a capacity for penetration of nearly two inches greater thickness of ordinary steel armor. The extreme cost of firing a fourteen inch gun will be $700. The cost of firing a twelve inch gun is $438. However, this is anticipating. It is what has been done that is of interest.

It is only by comparison with the great Dreadnoughts of Great Britain, Germany and France that one can have a better understanding of the capacity of the Delaware and North Dakota.

American Dreadnoughts.

The Delaware developed on her trial run the greatest speed ever made by a first class battleship. She is the most powerful fighter afloat at this time. She outclasses the British Dreadnought. In appearance she differs from the ordinary type. The forward deck is uncommonly high and broad, so as to prevent heavy seas from breaking over the bows and making it possible to fire guns in the forward turrets when the ship is at full speed in a storm. In her main battery she carries twelve inch breechloading rifles mounted in pairs in electrically controlled elliptical turrets situated on the center line of the ship. All ten of the guns can be fired on either broadside. Two skeleton masts set off her superstructure in place of the steel tube masts formerly in use. The new type is made of small steel tubes and steel wire cables. The Delaware is also equipped with two submerged torpedo tubes and has a water line armor belt from stem to stern eleven inches thick along the engine room, fire room and magazine space stepped down at bow and stern. Her length is 510 feet between perpendiculars and 518 feet 9 inches over all. Her beam is 85 feet 3 inches; draft, 27 feet.

The North Dakota, with the same tonnage as the Delaware, will attract worldwide interest among naval people because she is the first battleship anywhere to be fitted with the Curtis type of turbine and is the first in the United States navy to have any kind of turbine. She is much larger than the original British Dreadnought. Her screws are of the Monel metal and weigh about six tons apiece and are some ten feet in diameter. The Monel metal is a new invention. It is practically two-thirds nickel. It will stand a pressure of 80,000 pounds to the square inch, take a high polish and is noncorrosive in water.

The crack battleship of Great Britain, the Neptune, is the biggest warship ever constructed by any nation thus far. Her keel was laid last January, and she was launched at Portsmouth eight months after. She will be completed in January, 1911. The tonnage of the Neptune is 20,250 tons, or more than 2,000 tons heavier than the Dreadnought. Her length is 530 feet, ten feet longer than the Dreadnought, and she is two feet wider. Her beam is eighty-four feet; designed speed, 21 knots; horsepower, 25,000. Her armor is to consist of hardened Krupp steel, eleven inches thick amidships and tapering to four inches at each end, and she will carry ten twelve-inch guns. When afloat she will represent an investment of $10,000,000. Nevertheless, at the rate of construction of Dreadnoughts the supremacy of the Neptune is destined to be short lived, for, as before stated, the United States has already appropriated funds for the construction of two that will be greater by 5,550 tons each.

Germany's latest Dreadnought, Ostfriesland (or Oldenburg), has a tonnage of 19,000 tons and carries twelve twelve-inch guns. On the other hand, it must be remembered that Germany has others of the same class. By the close of the present year she will have eleven Dreadnoughts, super-Dreadnoughts and Invincibles launched or in stocks. German experts are confident that the Helgoland, the Ostfriesland and the Beowulf will each be superior to Britain's Neptune in striking force, broadside fire and weight of metal. If the Neptune falls below the German standard either in striking power or more destructive guns at longer range or in a more serviceable subsidiary battery, the armaments of the Hercules and the Colossus will be increased beyond the maximum now known in the British navy.

The Westfalen, the first vessel of the super-Dreadnought type built for the German navy, was launched last July. On her trial trip she exceeded her contract requirements, developing a speed of 20 knots, while her engines indicated 24,000 horsepower. She has a tonnage of 18,500 tons, and her main armament consists of twelve eleven-inch guns. The projectiles fired by these guns are of 760 pounds weight.

If the Indefatigable shall be outclassed by the two armored cruisers soon to be launched at Hamburg, 28 knot or even 30 knot super-Inflexibles with thirteen and one-half inch guns will be deliberately laid down on the British dockyards. The super-Dreadnought is already making Dreadnoughts such as have been described take second place, although only three super-Dreadnoughts have been launched, and the entire class of battleships and cruiser battleships is so new that only a few advanced nations have experimented with them or possess the mechanical plant requisite for constructing them.

France, Japan, Brazil and China.

The French Mirabeau just launched is one of a class of six to be launched. The Mirabeau is the fifth. She is a vessel of 18,027 tons and will be armed with four twelve-inch and twelve 9.4 inch guns, giving her a greater weight of gun fire than the Dreadnought, which was the first of that class. All these French fighters are to be completed by 1914.

The Mikasa, one of the great sea fighter of Japan, which sank and was refloated and reconstructed, has a tonnage of 16,250 tons and carries four twelve-inch guns (45 caliber), which can load in any position. On her trial she developed 16,400 horsepower.

Brazil is also in evidence in big sea fighters. Her Minas Geraes has a displacement of 19,250 tons, and the Rio Janeiro, a sister ship, carries twelve twelve-inch guns.

Contracts involving the purchase of more than $20,000,000 war munitions and battleships will be made by China within the next six months, and it is intimated that the United States will get some of the orders.

STANLEY PRATHER.

Street Railways In London.

The minimum street railway fare in London is 1 cent. The council's cars carry about 412,000,000 passengers a year, and of this number 24 per cent travel at the one cent fare. The maximum length of the one cent fare is one and one-quarter miles. The average one cent stage, however, is 1,022 yards. The longest distance from central London to a suburban terminus is nine and one-half miles. Transfer tickets from 2 up to 8 cents are in use in several cases on the council's system. These tickets are a convenience to the public, while at the same time they save the council from running certain through services which would probably not be remunerative. Transfer tickets are issued only on routes where no through service is in operation and at certain specified points. The council has to pay tax rates to the amount of about $2,433 a mile of track, besides income tax charges on the profits. The council is required to maintain the paving eighteen inches outside the outer rail and the whole of the area between the rails.

Most Powerful Gun In World.

The new American twelve inch gun, with its penetration of eleven inches of Krupp steel at 9,000 yards, makes it the most powerful gun in the world. It is capable of more than that, but the eleven inch penetration at 9,000 yards would be obtained through the use of normal pressure in the powder chamber and not through the use of an excessive pressure that would soon cause the gun to waste away. The pressure would be about seventeen and a half tons to the square inch, at the maximum, to the firing of the latest twelve inch gun, and this is the pressure that would be used in actual service, enabling it to penetrate eleven inches at 9,000 yards. The shot from the proposed fourteen inch gun would be even more powerful than that of the twelve inch and would penetrate two more inches of Krupp armor at 9,000 yards than the latest twelve inch weapon.

The Stimulus of Clothes.

Clothing, particularly new clothing, is a powerful mental and moral tonic, according to a medical specialist of London. The specialist says that shabby or ill fitting clothes are a source of constant worry, which tends to take the keener edge off the wits of the average man. "The mere fact of being smartly dressed," adds the doctor, "is a strong mental stimulant, and the man who is shabby and knows it is often less capable than his well dressed mental inferior." All this is very comforting to the trade and opens out an alluring vista of the possibilities of the future when the doctor tells his patient that his nerves are run down and that he must get a new suit at once or the result may be serious. The trade will not then be dependent on the capricious weather. On the contrary, if there is a spell of bad weather the medical profession will send a large number of patients to be treated by the clothing cure.

Eat Wood as Food.

In one-quarter of the earth at least wood in a certain form serves as a common and constant article of diet, and that is the northern coast of Siberia. At several points the natives eat wood and eat it because they like it. Even when fish is plentiful wood forms a part of the evening meal of these natives, as testified by numerous travelers. Cleanly stripped larch logs near every hut in that region are silent witnesses to the general fondness for wood diet. The dish is prepared by scraping off thick layers immediately under the bark of the log. These are chopped fine and mixed with snow, the whole being boiled in a kettle. Sometimes a little fish roe, milk or butter is mixed with the wood.

Cigarettes In Mexico.

The cigarette is far more popular among women in the upper circles of European society than it is in Mexico, where if you find a lady smoking she is quite sure to be an elderly woman with an addiction to old customs. That Mexican women generally smoke cigarettes is a notion cherished by foreign writers of Mexican romances sprinkled all over their pages with "Caramba!" "Mi Vida," "chili concerne," etc.

A Gift of Wheat 3,400 Years Old.

Some of the wheat which was stored by Joseph during the seven years' famine in Egypt has been sent to a citizen in New England. The wheat will not be planted, as there is no hope that it will grow.

Edwin Hawley's Railroad Success

The Man Who Held His Own With Harriman and Has Become a Financial Factor.

EDWIN HAWLEY.

WHEN Edward H. Harriman died there were some people who talked as if they believed there was a hiatus in the railroad affairs of this country that would not be completely filled until some one in the background grew up to Harriman's shoes.

There were others in the street to which all great railroad and other huge transactions terminate or from which they go out, as you please, who fairly guffawed, metaphorically, at these lamentations. The "others" had known what Edwin Hawley was doing long before Harriman ever dreamed of quitting. Mr. Harriman himself knew, for it is one of the stories of the street that Hawley was the only man Harriman ever met who bent the steel of the magnate who recently passed away.

It is a strange that the outside world made its daily tergiversations without apparent knowledge of what Edwin Hawley was doing. He never did business on the housetop. He never scrambled with the crowd to be focused by the light that shimmers for anybody who hungers and thirsts for that sort of publicity. He knew nothing of the megaphone methods of business.

While other giants in the railroad business were reaching out for trunk lines Hawley was gathering in the little lines one at a time until he had enough to make it known that he was a factor to be considered. Here and there were unfinished lines that were practically idle. Every now and then one of these fell into Hawley's hands, and while some wondered what he wanted with it, to, it began paying dividends. After he had met Harriman the latter never evinced any disposition to renew the contest.

Meanwhile Wall street, that knew something of the man, watched his silent comings and goings, and now there are those who make bold to predict that a greater than Harriman is here. One of the first transactions that made the street fleck the dust from its eyes was that between Hawley and James J. Hill. This was the sale by the former to the latter of the Colorado and Southern company, with 2,000 miles of road. The price was big enough to make many wonder if Hill was asleep when he paid the price. On the heels of this, when Hawley in his characteristic manner took in the Chesapeake and Ohio and its interests, there was enough nudging in Wall street to make the crowd wabble.

Now that Edwin Hawley is recognized as the greatest railroad collector of the country, by which is meant his genius for getting possession of so many small lines, the curiosity to know something about his beginning is pardonable. He was born in Chatham, N. Y., fifty-nine years ago. When he was out of school in his native town he used to put in his spare time at the railroad station watching trains. If he ever dreamed of being in the business no one knew it. Before he attained his majority he went into the commission business, but it did not pay, and he went to New York city. His first job there was in connection with tugboats. That was too slow, and he obtained a clerkship in the general offices of the Erie railway. Just how he shifted himself from that place to the offices of the Ohio and Mississippi railroad company is not of record, but that is what he did. But his opportunity came when he was found by Collis P. Huntington, who owned the Southern Pacific. Huntington put him in charge of the New York office, in which centered many if not all of the Huntington properties. Hawley made a striking success in his work. People who saw them said things about him that would have made a weaker man dizzy. Just then Harriman got to be the power in the company and put in his own man. Hawley resigned. He was not the sort of man to show that he was hurt, but he had a streak of human nature in him that rankled, and he bided his time. Since the discharge and the quarrel Hawley has been at work, and this is the result, showing what he has acquired since the row:

	Miles
Minneapolis and St. Louis	1,027
Iowa Central	158
Chesapeake and Ohio	1,840
Chicago and Alton	924
Toledo, St. Louis and Western	451
Hocking Valley	247
Toledo and Ohio Central	441
Missouri, Kansas and Texas	2,779
Operated by the M., K. and T.	272
Total Hawley control	7,963

It is one of the stories of the street that Hawley has his eyes on the Pacific slope. If so he is headed that way with some good properties. He now controls, in addition to all the eastern lines, the Chicago and Alton and the Toledo, St. Louis and Western. He is regarded as important in the affairs of the Western Pacific as George Gould and is conceded to be as strong in the Rock Island as ever was Harriman. Hawley and his associates own the Missouri, Kansas and Texas, and it is declared and believed in the street that the combination has made a traffic arrangement with the Kansas City, Mexico and Orient that will take their business to the Pacific. In addition, the combination expects to build a connecting link in the Minneapolis and St. Louis line that will give Kansas City another direct road to the Twin Cities of Minnesota.

Edwin Hawley has a home on Long Island and also has one in New York city. When he is at either his family know it, but the public that is always on the alert to know what a magnate is doing socially will remain in the dark so far as Hawley is concerned, for his name does not figure among those who are engaged in such affairs as make up society. He belongs to few clubs and prefers to get his pleasure in golfing, motoring and riding horseback. He is a millionaire. One report is that he is worth $20,000,000. But nobody knows—but Hawley.

He is small in stature, and his frame is surmounted by a large head, with a forehead indicating brain power. What hair he has is gray, and his eyes are set deep. There is nothing on his face to conceal the lines of character, as he is clean shaven. He is president or director in a number of companies and interested in banks, copper mines, bridge building, car coupling, lighting and heating, real estate, and, of course, his great hobby is railroads. He is deliberate in manner and speech, but when he acts he is quick, and there is no revision of his conclusions. His associates are men who have done big things.

GEN LANDIS

Art of Grinding Glass.

What is said to be an important discovery in the glass industry has been made which will tend to revolutionize the art of grinding glass. The grinder recently discovered is made from one-half best portland cement and one-half silica sand. In this stone there are no soft or hard spots, and it will grind glass without scratching. The cost of the grindstone is about 10 per cent that of the common grindstone.

Sir Thomas Lipton's Revisit

Ambition of a Man of Many Millions Is to Win the America's Cup.

SIR THOMAS J. LIPTON.

SIR THOMAS LIPTON'S visit to the United States always excites interest. First of all he is a pleasing gentleman and a successful business man of the world. Besides these, he is what Americans like—a game sport in the best definition of that term. No man who has come over from the other side to test the prowess of any American in any particular business or sport ever did so with as much complacency as Sir Thomas. Even to defeat he is gracious in mode.

His present visit is to arrange for another try for the America's cup. Thrice has he come to wrest the trophy in the keeping of the New York Yacht club, where it has been since 1851. Three times he came with Shamrocks I., II. and III. Shamrock I. and II. lost in the races of 1899 and 1901 respectively, the Columbia being the winner in both contests. The last trial was in 1903, when Shamrock III. lost two out of three races, the loss of the third race not being material because Sir Thomas had got lost in the fog. The best that held the cup at that contest was the Reliance.

The races of 1905 occurred Aug. 22, 27 and Sept. 3. In 1903 the races took place Oct. 16, 17 and 20. The races in 1901 came off Sept. 28 and Oct. 2 and 4.

Thus it has been six years since Sir Thomas came his third attempt to lift the cup, and as he says a year in which to build another boat does not meet the requirements of defenders of the cup the next race must take place before 1911, even if Sir Thomas is successful in arranging for the fourth try.

If the race is arranged it will be through one of Sir Thomas' cards, the Royal Ulster or the Royal Irish Yacht club. The report that he might have a boat built by some Canadian yacht club is denied by the man who brought over the Shamrocks.

The doughty Irishman who is here to challenge has already instructed William Fife of Scotland to draw up plans for a racing yacht and expects to place another order with Alfred Milne for a second boat, providing his challenge is favorably received. The deed of gift stipulates that a challenge for the America's cup must be made "with a yacht or vessel propelled by sails only and constructed in the country to which the challenging club belongs." This clause may be abrogated by mutual agreement.

In Sir Thomas' opinion it is not only impracticable, but also dangerous, to send a racing yacht across the water, and he is further of opinion that the stand of the New York Yacht club concerning a race for the America's cup is inconsistent with true sport. He is willing to build a boat to race under the universal rule that governs all yacht racing in this country except for the America's cup.

It is not necessary here to recapitulate what has taken place or to indulge in conjectures as to what will be the outcome of the visit at this time. The results up to date are matters of yachting history, and as one of Sir Thomas' country's poets has said, "What is writ is writ." While Americans had rather see him "lift the blooming cup," as he once expressed it, than any other man, and while they will be interested in reading about his efforts to win, they have a more kindly interest in him as a man.

While there is nothing unusual in his appearance, he would be easily recognized in the street of any American city he might visit. He is one of the best advertised men in either hemisphere. He is the personification of cosmopolitan. He is a bachelor and has passed his fifty-ninth birthday. He was born in Glasgow, Scotland, but mind you, of Irish parentage. It was by royal order that Thomas Johnstone Lipton got his present title, which he carries with increasing modesty.

His fortune is reported to be somewhere in the neighborhood of twenty millions of dollars, which is being added to yearly. While he is no [illegible] his money, he does [illegible] his business all authentic methods to stimulate trade and [illegible] the [illegible] of conducting his [illegible]. His offices are decorated with British and American flags. He is most [illegible] of all in his [illegible] and [illegible] and then he brings a few hundred at a time to go with him to Dublin, his beautiful country residence. At Old Kentucky and when they are there they are about as public [illegible] at home.

One of his [illegible] is the Alexandra trust, a scheme along the line of the [illegible] which [illegible] such a success in Vienna. He has always shown deep sympathy for the lower classes, especially in what they eat.

THOMAS KEMPER.