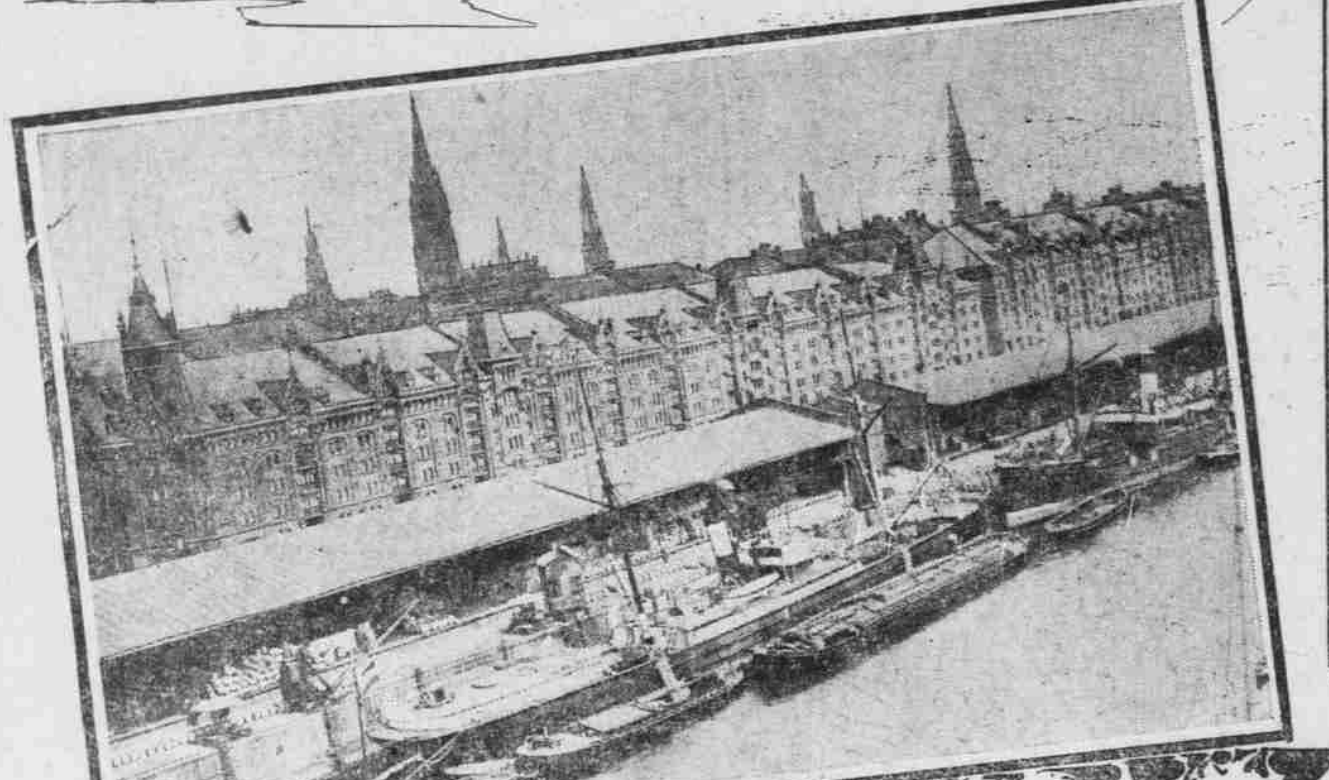
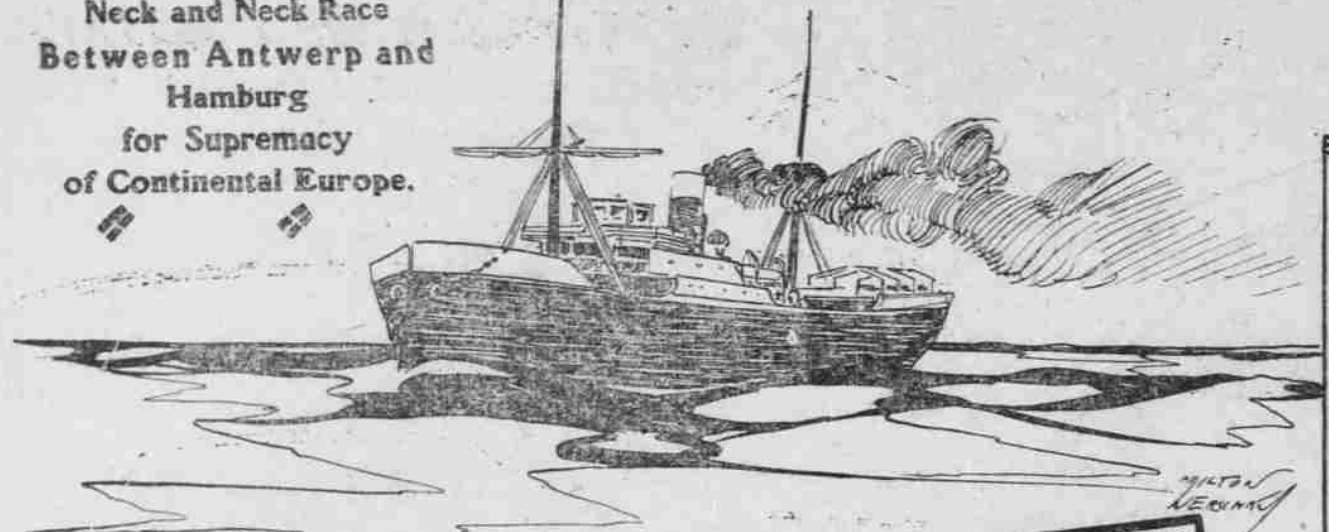


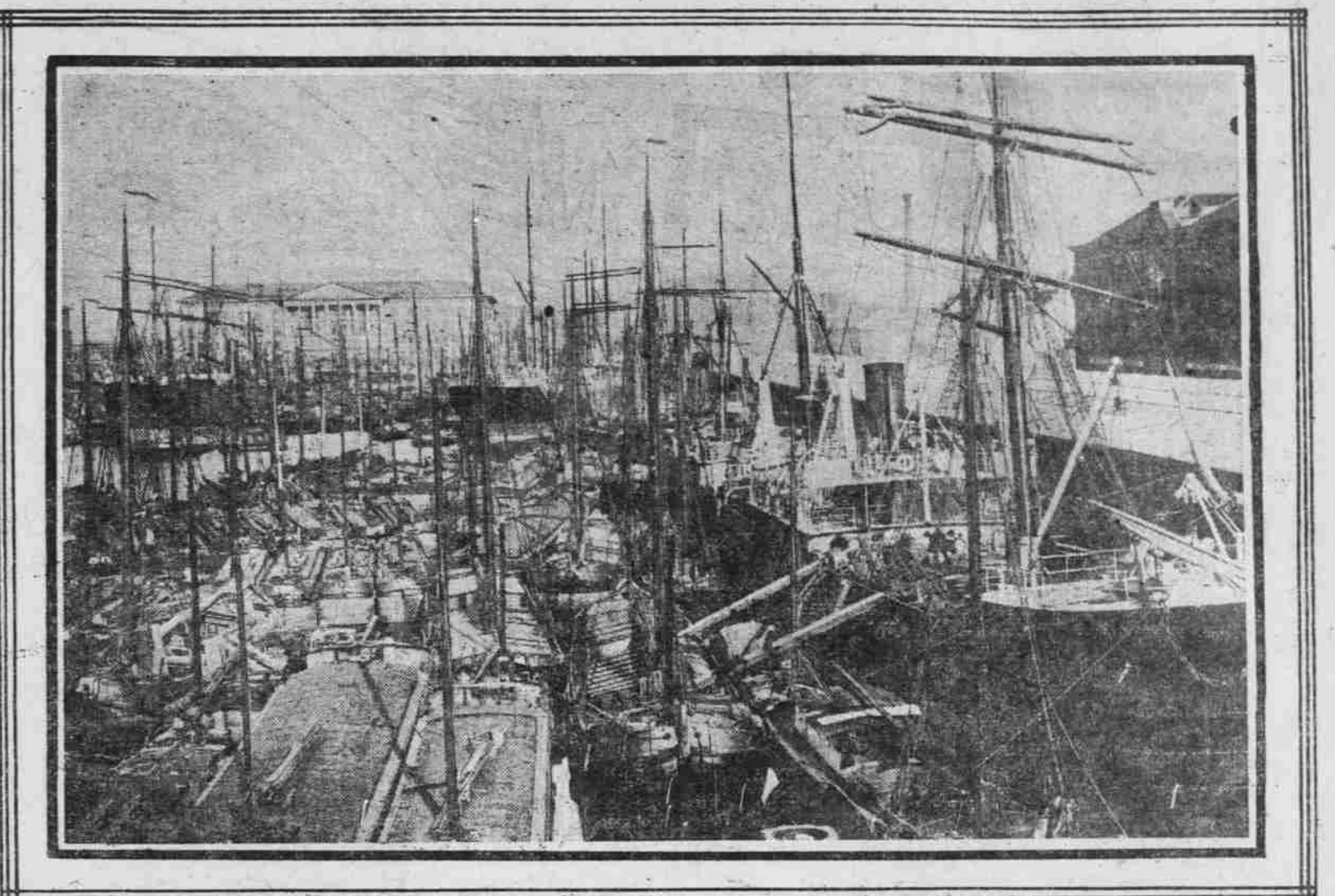
# WORLD'S TWO MOST ENTERPRISING SEAPORTS

### Neck and Neck Race Between Antwerp and Hamburg for Supremacy of Continental Europe.

### Object Lessons for Portland Which Will Surpass Either Before Attaining One-fourth of Their Age.



THE SANDTORREIN AT HAMBURG



CROWDED BASIN IN THE ANTWERP HARBOR

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**HAMBURG, Germany, Oct. 1.**—Running a neck-and-neck race for supremacy in world commerce, the quaint, ancient Belgian city of Antwerp and the only slightly younger but much less quaint German city of Hamburg, now claim third and fourth place in the list of the world's twelve great ports. The claim is probably correct in the latest list to which I have access at this moment, Hongkong, in China, leads them both, and is entitled to second place, London only being ahead of the Chinese port.

The German and Belgian cities, therefore, are clearly entitled to the commercial leadership, which they enjoy in their caps. They have won through a combination of government assistance and true American hustle; the latter has included the adoption of the most modern methods in every possible direction. No other two ports in the world could equal these two old European ports, either in the arrangement of their docks and wharves or the facility with which the loading and unloading of ships are carried on.

New York, especially, may well hold its commercial head with alarm whenever its antiquated, ultra-conservative port methods are compared with those of Antwerp and Hamburg. Some of the big lake ports handle cargo in an up-to-date way, but there is no port, either on salt water or fresh, in America which remotely approaches these European ports in rapidity or economy of cargo handling.

#### Cranes by the Hundred.

In the first place, neither Hamburg nor Antwerp wastes a plenny or a centime on unnecessary trucking. Both load from and discharge their cargoes directly into the cars when it comes to them or is taken away by rail. Cargoes received or to be taken away by river boats are handled direct also. Lighters are seldom employed, even when the cargo is shifted from one ship to another, it being more economical as a rule to do the transferring by rail.

It follows that no wharf in either port is without its railroad tracks, nor is there a pier for deep-sea or heavy river shipments without its full complement of cranes, operated, not by the noisy, dirty steam engine, but by electric or hydraulic power. The former predominates in Hamburg, the latter in Antwerp. Both ports formerly used steam, but its day upon the piers has passed away.

Despite the difference in power, the working of the cranes is alike in the two ports. As you stand there, in either and you will be fascinated by the apparent ease and quietness with which the work is done. You are sure to be impressed also by the apparently resistless power displayed. There is little creaking of chains and little shouting. You look in vain for the array of mauling, swaying, profane longshoremen, working strenuously in long processions, which are so important a feature of the New York water front.

I first saw the cranes doing their silent work on the Mur du Quai, which extends along the town front of the river Scheldt, on which the city is situated, at Antwerp. The freight cars are run alongside the steamers on tracks of the standard American gauge. The cranes stand astride the cars on trucks resting on tracks with a gauge of 12 or 13 feet, the track for the cars being laid in the middle of the wharf line. Each crane is surmounted by a little house or cabin. In it sits the operator. Suppose a cargo of steel rails has to be taken from flat cars and loaded into a ship. At a signal from the man in charge the crane's gigantic arm swings over the car, the depending chains meanwhile being lowered. Men working on the ground pass them around as many rails as it is desired to raise. Another signal is given, the rails are hoisted, the arm swings them over the ship, and they are swiftly lowered into the hold, the only noise being the clanking of the rails. Cargo composed of packages are handled as easily and noiselessly; that you are hardly aware of any weight, that anything special is being done, yet they load ships at both Hamburg and Antwerp in only a fraction of the time required at New York.

Most of the cranes are made to lift only moderate weights—of a few tons,

say—but there is a coal-clip at Antwerp that will pick up a loaded coal car, carry it to the chute and incline it so that the contents will slide into the hold of the steamer as quickly as a ton of coal can be transferred from truck to cellar in any American city. There are several such coal clips at Hamburg, and at both ports there are shears and cranes capable of lifting 120 tons with ease. One of these could lift one of our great American locomotives off the tracks and set it bodily into the hold of a ship. It could do the same thing with two of the big engines which haul the English railway trains about.

Now, cranes run by steam electricity and water, and as powerful as any here, are common enough in the United States. You will find them in the shipyards, the great manufacturing plants and air many other places, but nowhere are they so extensively used on American wharves as here and nowhere more effectively. There are more than a thousand of them on the wharves and piers of the two old ports, the exact number in Hamburg being 219.

Standing in long rows as they do at Antwerp, constantly lightening the labors of men, their creators they suggest irresistibly the fabled giant Antigo. According to the old legend, he used to lay a

heavy tax on every boat entering the port. He cut off and threw into the river the right hand of every boatman who refused to pay the tax. But the four-legged, benevolent hydraulic giants of Antwerp are benevolent, not malignant creatures.

In its way not less interesting than the half thousand cranes of Antwerp is the hydraulic station, where great steam engines strain constantly in the operation of gigantic pumps, and from which the water to operate the cranes is distributed at high pressure through miles of pipes. Here in Hamburg there is an electric powerhouse which supplies the necessary current to the dock cranes.

**Antwerp's Docks and Piers.**  
The Mur du Quai, which is leased by several great steamship companies—running liners to most of the ports on the borders of the Seven Seas, was built by the City of Antwerp at a cost, including the Belvidere or elevated ornamental promenade which surmounts a part of it, of \$20,000,000. In 1871, six hundred houses were demolished to make room for it. It is nearly two miles long and 300 feet wide. It is covered with iron sheds, built for beauty as well as utility, and its stone work is richly sculptured in many places.

But while the wharves of the Mur du Quai alone would furnish more than ample shipping room for some of our ports, it affords for only a fraction of the Antwerp shipping. There are now in use besides eight large and two small basins or

“basins,” the largest of which is the Kattenhoek dock, next come the American and Lefebvre; the first given up to trade with the Western Continent and the second mainly to the ships which ply between Antwerp and Arles. For the port being Belgian it has the bulk of the trade with the Congo Free State, which is ruled by the King of the Belgians.

Some of the smaller piers were built during the French occupation by the First Napoleon, who, by his decree of July 20, 1803, proclaimed Antwerp the first harbor for men-of-war on the coasts of the North of France. One of them is about 1300 feet long, while another is rather more than 500. Napoleon spent 13,000,000 francs and 12 years on these docks. Altogether, Antwerp now boasts 10 or 12 miles of docks and quays.

The immense new basin now under course of construction and to be finished in the next two or three years will give Antwerp about 14 miles of ship room, but even this will soon be inadequate, and harbor extensions on a scale elsewhere unknown are planned which will probably become an accomplished fact inside the next 15 or 20 years. Then, if the docks and quays of Antwerp were stretched in a straight line, they would reach 25 miles.

The plans include a complete change of the Scheldt's course for some miles, the destruction of three or four villages, and the creation of an island to be surrounded by the old and new channels.

The expense of all this, above \$50,000,000,

is to be borne by the city ultimately, though the Belgian government is advancing the money for the basins now being built. Most of the wharves and quays are leased to the big steamship companies.

#### Bustling Port of Hamburg.

I made the rounds of the Antwerp harbor works in a cab most prosaically. A few days later I visited the “Freihafen” or free port of Hamburg, which comprises by far the larger part of the harbor here, in a steam launch most picturesque. To my American eye Hamburg appears much the busier, and consequently much more like home. Certainly the waters of the port here are as thoroughly churned as those of any in the world.

At the present time Hamburg has about 12½ miles of docks and quays. And despite Antwerp's aspirations the shipping and business men of Hamburg have no fear of being left in the race. They possess that splendid confidence in the future which is shown by the business men of the most progressive and hustling American cities, and are looking forward to the continued and almost unlimited growth of their port.

The free port is so termed because goods and materials brought into it and exported, either in the same condition as imported or after being manufactured into some other article of trade, are obliged to pay no duty. The

free harbor was created in 1858, until that year Hamburg was not a member of the Imperial German Customs “Zollverein.” Many Hamburgers then believed that the change would ruin the trade of the port. This afternoon a framed newspaper page, published in 1858, bearing a cartoon prophetic of the supposedly evil days to come, was pointed out to me by a German friend whose faith in the port's future was typical at the time. His faith has been abundantly justified. Since then the port's commerce has grown “by leaps and bounds,” and today Hamburg stands twenty-second among the cities of the world.

Like the hydraulic cranes of Antwerp, the electric cranes of Hamburg are of several types. Those in use on the Kaiser Wilhelmshafen quays and the others of the new harbor, completed four years ago at an expense of many millions, are even more impressive in appearance, collectively, than those in Antwerp. A long perspective of them is shown in one of the

photographs which illustrate this letter. In operation they remind you of the almost human crane work done in some Pittsburg steel mills.

The cost of this free port was \$10,000,000, of which Hamburg paid \$3,000,000 and the German empire \$7,000,000. 20,000 people were expelled from their homes that the “Freihafen” might be built, and its construction, which occupied five years, kept several thousand men busy during that time.

It would be impossible to collect accurate figures as to the aggregate cost of Hamburg's harbor works today, but it must have been more than \$100,000,000.

#### Always Essentially Commercial.

From the nature of their respective locations, Antwerp being at the head of navigation for ocean-going vessels on the River Scheldt, sixty miles from the sea, and Hamburg, ninety miles up the river Elbe, the two cities have practically always been essentially commercial. The origin of the present Antwerp may be traced back to the sixth century, when a Saxon colony took possession of some ruined Roman fortifications and settled thereon. They named the settlement “Ant-Werp,” which means literally, “On the Pier.”

By the seventh century ships from this port were visiting most of the German Ocean or North Sea ports, including those of England. America's discovery gave Antwerp a great impetus; but 1658, under Charles V., it had 125,000 inhabitants and was the most flourishing city in Christendom, surpassing even Venice. From that time until 1850 its history was a succession of ups and downs.

It suffered from religious disturbances; it was overrun by the Spaniards, by

Antwerp's, Charlemagne is supposed to have founded Hamburg; certainly he sent a bishop there to preach the Gospel. By the year 831 the town was well established, and in the following century it engaged in many contests with its neighbors. It was long in the jurisdiction of the Counts of Holstein, who obtained for it many privileges. Its connection with the Hanseatic League came afterward.

The league's dissolution was followed by the discovery of America, and this helped Hamburg as much as it did Antwerp. Still, the present era of prosperity did not begin until much later. Hamburg escaped the Spanish fury altogether, but in 1656 it was annexed to the French Empire. In 1812 the people tried a little rebellion of their own, but failed. During the French domination the damage to the city's commerce amounted to nearly \$90,000,000, a much larger sum than it would be today.

In 1824 there was an enormous fire, which set the town back. Still, Hamburg's prosperity has never flagged. Antwerp's has, and from the close of the Franco-Prussian War which brought the city into the German Empire the commerce of Hamburg has been constantly increasing, especially since it entered the Imperial Zollverein and set apart a large portion of its harbor as a “Freihafen.”

The carrying on of the free port furnishes an essential picturesque element. The “Freihafen,” which lies entirely on the northern or right bank of the Elbe, is separated from the customs harbor by a barrier which looks more like a great picket fence set in the water than anything else. Its necessary openings are guarded both by men and swift harbor craft, whose functions are precisely the

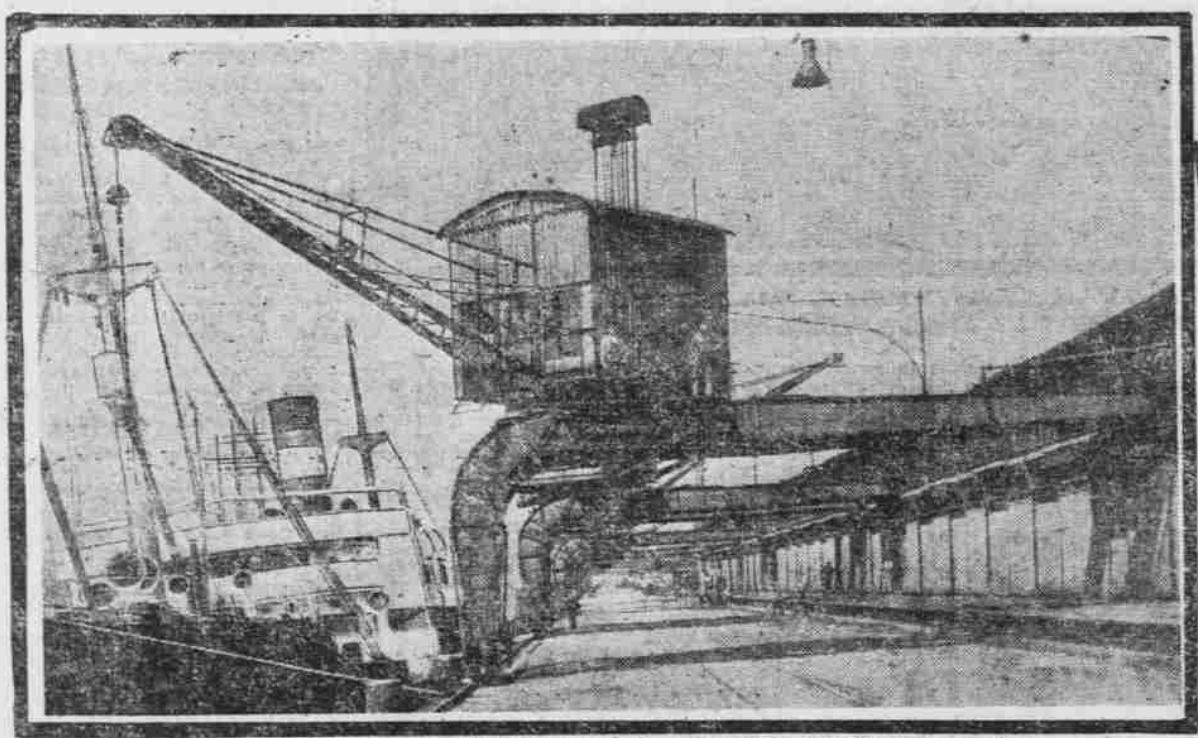
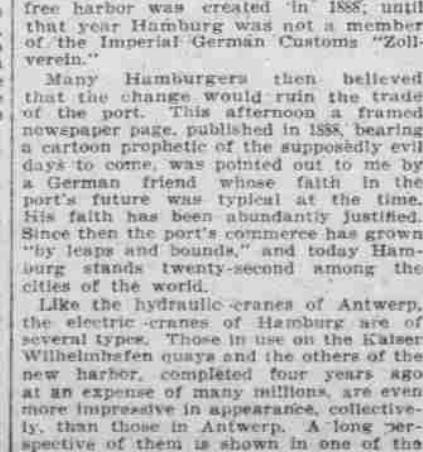
same as those fulfilled by our own revenue cutters.

The docks in the free port include a “Fischerei,” devoted to petroleum, in which Standard Oil ships are always to be seen; an “Indiahafen,” an “Atrikahafen,” a “Segeleschiffhafen,” etc. The last named of these is sacred to sailing vessels, as its name indicates, and, as there are practically no schooners in European waters, the shipping in that “hafen” presents the finest example of the old time “forest of masts” to be found anywhere.

Hamburg being well to the north, its port often freezes in winter, and it therefore maintains four heavy ice-breakers built on the model of the famous Russian ice breaker Yermak, which, in turn, was modeled upon the ice breaker that kept open the straits between Lake Michigan and Lake Huron late every fall and opens them early every spring.

Aside from the fact that these ports are in close competition for supremacy in

#### THE STIEN AT ANTWERP, SHOWING MODERN CRANES AND DOCK SHEDS ON EITHER SIDE.



PERSPECTIVE VIEW OF HAMBURG'S ELECTRIC DOCK CRANES