BRITISH NAVIGATION STATISTICS FOR 1897.

The bigness of the British ship-building industry and the mercantile marine of that nation is strikingly illustrated by the "annual statement of the navigation and shipping of the United Kingdom for the year 1897," which has just been published. The number of vessels which arrived at all ports in the United Kingdom, over sea and coastwise, during the year, is shown to have been 394,464, representing an aggregate tonnage of 101,442,082 tons, as compared with 397,090 vessels of 98,093,454 tons in 1896. Of these 29,818 vessels, of 14,635,322 tons, were foreign, and the remainder British. The total number of vessels remaining on the registers at ports in the United Kingdom and British possessions abroad on December 31st, 1897, was 34,962, representing in the aggregate 10,416,442 tons, as compared with 35,735 vessels, of 10,503,307 tons in 1896. During the year 1,054 vessels, of 482,267 net registered tons, were built in the United Kingdom for British owners, and 229 vessels, of 162,430 tons, for foreigners. In 1896 there were built for home account 931 vessels of 519,790 tons. From a table which shows the number and tonnage of the vessels of all classes that entered and cleared from the various ports during the year, we extract the following:

Total Entries and Clearings.

Port	Ships.	Net regist'd tonnage.
*London	79,528	25,009,789
Liverpool	39,359	17,913,989
Cardiff	31,200	17,824,930
Tyne ports	28,487	15,471,577
Glasgow	20,934	7,073,424
Hull	11,295	5,516,007
Southampton	24,228	5,435,754
Sunderland	14,041	5,299,683
Belfast	21,987	4,971,457
Dublin	16,455	4,846,854
Newport	16,537	4,816,849
Middlesborough	7,472	3,752,703
Greenock	18,333	3,549,927
Portsmouth	28,217	3,212,478
Leith	8,472	3,167,332
Swansea	11,457	3,119,693
Manchester	10,169	2,301,269

* It has not been found possible to keep a record of the ships clearing from London in ballast coastwise, and these are therefore not included in the total.

TALL CHIMNEYS OR FORCED DRAFTS.

An experiment which may prove the forerunner of great changes was made the other day in Massachusetts: When the tracks of the New York, New Haven & Hartford Railroad were elevated recently at Jamaica Plain, in Massachusetts, it became necessary to remove a number of the adjacent buildings of the B. F. Sturtevant Co., and to change the location of the existing boiler plant. The chimney of the works, which had previously served as a means of producing draft, was thus rendered absolutely useless because of its distance from the new location of the boilers. It became a question whether another chimney should be erected or some other mode of smoke emission tried. The Iron Trade Review thus comments on what followed: "The B. F. Sturtevant Co., who are large makers of fans and are installing large numbers for the purpose of mechanical draft naturally turned to the latter. A specially designed fan was placed on top of the boilers, connection was made to the uptake, and a short stack was provided extending just through the roof. The fan is equipped with a direct connected upright engine.

The deterioration of the unused chimney and the desire to use its bricks in the erection of a new building, led to its removal, and there is now the unusual spectacle of a large manufacturing establishment without a chimney, or at least anything that fills the ordinary definition of such a structure.

In the enumeration of advantages to be reached by the new arrangement, it is pointed out that the capacity of the draft fan may be varied at will; great intensity of draft may be maintained without reference to the conditions of the weather, which often affects the working of a chimney. The draft may be maintained moreover, while the waste heat in the gases is utilized by the economizers. Another fact is that it can be installed for much less first cost than a chimney.

MANCHESTER SHIP CANAL.

The directors of the Manchester Ship Canal Pontoons and Dry Docks Company, in a report just issued, say the result of the trading for the year ending October 31st, 1897, including the balance of £361 from last account, shows a profit of £6,405. Dividends have been paid out of this amount of 5 per cent. on preference shares (£1,100) and 2½ per cent. on ordinary shares (£1,826), leaving a balance of £3,479, which it is proposed to deal with by writing off for depreciation £1,000, by placing to the reserve fund £1,000, and by carrying forward £1,479. The result of the trading compared with previous years shows a steady improvement, and the report points out that vigorous efforts are still being made by the Ship Canal Company and others to further increase the traffic on the canal by the erection of grain warehouses and oil storage tanks, and the extension of railway connections.

—Progress in ship-building in Germany is well illustrated by the following statistical summary: From 1871 to 1880 the ten leading ship-yards of Germany turned out new vessels aggregating in value $1,625,000; from 1881 to 1890 the aggregate was $21,975,000; and finally, from 1891 to 1896, a period only a little more than half as long as those preceding, the total value of output had risen to $257,500,000. German ship-yards which, on June 5th, 1882, gave employment to 23,000 men, had, on June 14th, 1897, in their employ over 35,000 hands.

—So far no heed has been taken by the Canadian Government to the formal protest made by Spain against allowing the United States revenue cutters to pass through the Canadian canals, on the ground that it is a violation of the neutrality laws. Had the Dominion Government so desired, it would have been possible, of course, to stop the Gresham in accordance with such a protest, but the cutters Algonquin and Onondaga will, until they reach Montreal, be considered the property of the Globe Iron Works Co., of Cleveland, the builders.—Marine Review.

EXPOSITION IN SOUTH AFRICA.

Consul-General Stowe, of Cape Town, says:

I am requested to present to the manufacturers and producers of America the advantages of exhibiting their productions at the exhibition to be held at Grahamstown, Africa, from December 15th, 1898, to January 21st, 1899.

It will be known as the South African Industrial and Art Exhibition, and is guaranteed by the governors of Cape Colony, South African Republic, Orange Free State, and Natal, and the high commissioners of Rhodesia and Basutoland. Over $100,000 have been subscribed, and exhibits from all parts of the world have been asked.

There are five classifications of exhibits, viz.: (a) Raw materials; (b) manufactures; (c) mining and machinery; (d) natural history and science; (e) arts.

To the manufacturers of agricultural implements and vehicles, and mining, cotton, woolen, electrical, woodworking, brickmaking, sugar, and all other kinds of machinery, this exhibition will be invaluable.—U.S. Consular Reports.

MODERN SCIENTIFIC FORESTRY.

"The proposal of Governor Black, which has now become law, to depute to Cornell the care of a considerable tract of forest land, and the duty of demonstrating to Americans the theory, methods, and profits of scientific forestry, has a curious appropriateness much commented on at the university," says The Scientific American Supplement, "since two-thirds of the wealth of Cornell has been derived from the location and skilful management of forest lands, the net receipts from this source being to date $4,112,000. In the course of twenty years' management the university has thrice sold the timber on small pieces of land which it still holds, and received a larger price at the third sale than at the first. The conduct of this land business is so systematized that the treasurer of the university knows to a dot the amount of pine, hemlock, birch, maple, basswood, and oak timber, even to the number of potential railroad ties, telegraph poles and fence posts on each fourth part of a quarter section owned by Cornell. Certainly Cornell is rich in experience for the business side of a forestry experiment such as Governor Black proposes. The university forest lands from which its endowment has been realized are in Wisconsin."

LIVED RICH, DIED POOR.

I knew Daniel Drew when he had $19,000,000, and he died in debt. I knew a gentleman who at one time had $3,000,000 in the bank, who is now earning about $1,200 a year. The $3,000,000 was in cash, in addition to his investments of various kinds. There are a dozen men in New York who ask me for occasional loans of from 50 cents to $5, who, when I first came to New York, were among the rich men of the town. It has been my fortune for a quarter of a century to be the counsel as a lawyer and associated in business with men whose accumulations distinguished them among their fellows as rich; it has been my experience, as I sum up through a quarter of a century of review of the lives of the thousand men who have been represented upon my ledger or in my secret counsel, that the majority of them either failed in business or died poor.—Chauncey M. Depew.

TWO CHEQUE STORIES.

One of them appears, illustrated in Notes and Gold, the organ of the bank clerk "I'm very sorry, miss," says the paying cashier, "but this is a crossed cheque, and I cannot pay it over the counter." "Oh, is it, really?" replies the fair customer. "How tiresome! Then I suppose I shall have to come round the other side to get it." This forms a reminder of the other cheque story, which is that of a Presbyterian minister, who had, to his intense surprise and delight, received an unwonted cheque from a charitable donor. "This cheque is to order, and must be endorsed," explained the paying cashier at the Highland bank. "Eh?" "Endorsed—across the back." "Oh, ay!" And with the pen and all his soul the minister wrote, "I heartily endorse this cheque."

—As to some of the problems of our age, Mr. Gladstone said, "I am not so much afraid, either of democracy or of science, as of the love of money. This seems to me to be the growing evil." Now the love of money has been an evil throughout the whole history of man; but it seems to us that it has not wrought such public evil as democracy or the scientific spirit. The one has weakened the sanction of government, the other has weakened the authority of faith and revelation."