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PRACTICAL WORK FOR THE WORLD'S FAIR.

The executive branch of the management of the world's fair to take place in Chicago in 1893 is now practically complete, the site has been actually settled upon, and the broad work of preliminary preparation has been vigorously begun.

The act of Congress under which the fair is to be held in Chicago is practically inoperative until the President "shall be notified by the commission that provision has been made for grounds and buildings for the uses provided for, and there has also been filed with him by the Chicago corporation satisfactory proof that a sum not less than \$10,000,000 to be used and expended for the purposes of the exposition has in fact been raised."

The Committee on Foreign Affairs for the World's Fair has held several meetings in New York City to look over the ground and arrange for the most complete variety of exhibits that it will be possible to get together from foreign countries.

DEFECTIVE NAVAL DESIGNING AND MATERIAL.

From the recent tests of armor plate at Annapolis it would appear that British practice in war ship building is more expeditious than certain, their compound armor plate having been fairly demolished by a gun play that the French nickel-steel plate withstood, and even the Crenset steel plate did not altogether succumb to.

reform—interposed; perhaps it was official negligence or something worse. In any case there is a lesson for us which should not go unheeded.

Armor plating is by no means the only department of British war ship building which has given proof of demoralization. Overweighted ships, unstable batteries, cumbersome and uncertain machinery, these, too, have resulted from much of the designing, and we do but quote the British critic insaying that such errors of construction have rendered an important part of the British fleet fairly impotent, the larger craft, as is demonstrated at each succeeding practice maneuver, exhibiting large capacity for consuming coals with small capacity for carrying them.

The light ships, too, the unarmored or partly armored cruisers, have been shown to be of incorrect dimensions, "too short and too broad for speed," we quote an English naval authority, "and lacking in coal capacity, too deeply immersed for safety and comfort of crews."

We had proof of this recently, in the case of our own Baltimore, for the designs of which a former Secretary of the Navy paid the British a large sum of money. The Baltimore recently averaged seven knots an hour, not much more than half the speed of a quick-heeled sailing craft with a fair wind, on a voyage to Stockholm, Sweden; and, while one apologist may allege that she had orders to go "slow," and another that this snail-like pace was owing to foul bottom and lack of sheathing, it may be averred without the fear of contradiction that she has not done anything since her trial trip to indicate a capability to fulfill her mission in time of war.

Evidence accumulates of the danger of following British criteria too closely, for while British designers have, with commendable zeal, pushed investigations in various directions and followed promising theories to their conclusion, they would seem not yet to have hit upon a design for a battle ship which so far as has been publicly demonstrated possesses all the elements necessary to effectiveness, to wit: buoyancy, coal capacity, invulnerability, steadiness.

We have their own word for this, with a deal of practical demonstration to sustain the assertion. The latest British authority to speak on the subject, Admiral Sir Thomas Symonds, has been incited by the recent tests of armor plates at Annapolis to send a circular letter to the English press summing up the present condition of British war ship designing and furnishing. He says: "Whether we regard our guns, our ships or our armor, the same lack of a wise and definite policy is evident. Our guns are admitted to be lacking in endurance, our compound armor has been proved to be incomparable with French nickel-steel, the bad system of our heavy guns and unsuitable mounting has immersed our battle ships so deeply as to necessitate their central body—in which the large quick-firing guns are placed—being left without armor, and consequently exposed with their crews to being swept away by shell fire. This overweighting, besides endangering the ship, a ship originally designed with far too low a freeboard, reduces to an absurd extent her coal capacity." Summing up, the British complaint is that their heavy ships menace their own crews while not having sufficient coal capacity to reach an enemy, their lighter ships having armor that won't protect, and speed that won't overtake.

As to our own navy, we have, as yet, succeeded in building a fleet of "commerce destroyers" which are not fast enough to overhaul the commerce they would destroy. Will the big battle ships now projected be able to resist the elements as well as the enemy?

New Steamer for the Coast Trade.

There was launched on the 1st of October, from the shipyard of William Cramp & Sons, the largest vessel ever built in the United States, with one exception. This vessel is named El Sol, and is owned by the Pacific Improvement Company and intended for service between New York and New Orleans. She is 400 feet long, 48 feet beam, and 33 1/4 feet deep, and has a tonnage of 4,300. She will be run as a freight boat exclusively, no accommodations being provided for passengers.

She is fitted out with steam steering gear, steam windlass and capstan, and all the other modern improvements incident to a first class freight steamer. She will carry four steel masts and be schooner rigged. The vessel will be supplied with triple expansion surface condensing engines, with high pressure cylinders 32 inches in diameter, intermediate 52 inches, and low pressure 84 inches, with 54 inch stroke, with a working pressure of 160 pounds. She has three double ended cylindrical steel boilers, each 13 feet 10 inches in diameter and 20 feet 6 inches long, each weighing about 58 tons. The machinery will develop 3,500 horse power, and the vessel is expected to attain a speed of 14 1/2 knots an hour.

BLACKENING the nose and cheeks under the eyes has been found an effectual preventive of snow blindness, or the injurious effect of the glare from illuminated snow upon eyes unaccustomed to it.