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TRIAL TRIP OF THE BATTLESHIP IOWA.

First-class sea-going battleship Iowa completed her trial trip over the official course on April 7, when she maintained an average speed of 17 knots during a continuous run over a 66 mile course. The run was completed after about eight hours of continuous steaming, at the end of which her boilers and machinery were in first-class working condition. The average boiler pressure was 152 pounds per square inch with one inch of air pressure in the stoke hole. The engines averaged about 112 revolutions per minute for the whole run. It is noticeable that the speed was remarkably uniform, and that there was no evidence of the ship making any spurts above her average speed. At the close of the run, the Iowa was tested as to her steering capabilities, and the helm being put hard over, she swung for a complete half circle, first to port and then to starboard. She was very quick in answering her helm and proved that she could turn a circle of something under 400 yards. It was noticeable that when the ship was being driven at full speed there was practically no vibration, what little there was being noticeable at the bow and stern. The contract speed for the Iowa was 15 knots per hour, and the builders were to receive a bonus of \$25,000 for every quarter of a knot in excess; a stipulation which will secure to William Cramp & Son, of Philadelphia, the sum of \$200,000.

The Iowa was designed for a speed of 15 knots under an indicated horse power of 11,000. As the power necessary to drive a ship varies as the cube of the speed, it is evident that on this occasion she must have indicated some thousands of horse power more than she was designed to do.

ENGLAND'S NAVAL POLICY.

The latest advices regarding the proposed increase to the English navy plainly indicate that there is to be no cessation in the activity which has characterized naval shipbuilding in that country for the last few years. The amount of money that has been appropriated for increasing and carrying on the naval establishment is something over \$115,000,000. During the next few months the government will commence the construction of four battleships of nearly 15,000 tons, three third-class cruisers, two sloops of war, four twin screw gunboats and two torpedo boat destroyers. A new yacht will also be built to take the place of the Victoria and Albert, a paddle steamer which has been used by royalty for a great many years. It is intended that the new yacht shall be one of the most sumptuous of its kind afloat.

The current programme is one of the largest ever laid down by Great Britain, as may be judged from the fact that during the next twelve months she will have built or will be constructing 14 first-class battleships of between 13,000 and 15,000 tons displacement, 8 first-class cruisers of 11,000 tons, 9 second-class cruisers of 5,800 tons, 10 third-class cruisers, 2 sloops of war, 4 twin screw gunboats, 52 torpedo boat destroyers, 8 light draught steamers for river service, besides the royal yacht above mentioned. The list above given represents in the aggregate 108 vessels, whose total displacement will be 380,000 tons and the total horse power 800,000. The total number of men in the navy will be increased to over 100,000. Under the head of improvement of foreign naval stations, provision is made for very extensive dredging, with a view to securing safe anchorage for ships of the deepest draught at all seasons of the year. Large docks are to be built at Jamaica, Bermuda and Hong-Kong, and three dry docks are to be constructed at Gibraltar whose length will be respectively 850, 550 and 450 feet.

ABANDONMENT OF A SOCIAL EXPERIMENT.

Two schemes for insurance against want of employment have existed for two or three years past in Switzerland, one in the canton of Berne and one in that of St. Gall. The former was voluntary, but in St. Gall the laborer was compelled to insure. The American consuls at Chemnitz and St. Gall have both recently reported on the subject, and the former states that men whose work is steady and likely to continue so complain bitterly that they are compelled to support in idleness others whose labor is uncertain, but who, for that very reason, are better paid when they are at work. "It is not in the nature of things for such a system to succeed, even among so loyal, loving, and gentle a folk as the Swiss. The effort is not vain, if it will teach the thoughtless how hard it is to make laws or to institute any system that is to take the place of thrift and economy during the days when work is plentiful." Some time after this report the consul at St. Gall wrote that the experiment has been abandoned at the instance of the laborers themselves. He says they "found that a system which insured against loss of work resulted in the promotion of laziness and idleness. In fact, a knowledge of the existence of this system of insurance had drawn to St. Gall a considerable number of unemployed from other parts of Switzerland, with the object of obtaining support at the expense of resident laborers." Hence the system disappears on and after June 30 next.

THE GOVERNMENT'S SCIENTIFIC EXHIBITS AT THE TENNESSEE EXPOSITION.

The preparation of the exhibits to be made by the Smithsonian Institution and its dependencies at the Tennessee Exposition at Nashville is well advanced. The exhibit of the National Museum has not yet been fully arranged, but it will consist essentially of a representative exhibit taken from each of its numerous departments, and will probably be confined to this.

The collections of the Smithsonian proper will embrace a complete set of the publications, including the Half Century book, which latter great work will here be seen by the public for the first time, and will also include portraits of James Smithson and Thomas G. Hodgkins and a plaster model of Joseph Henry.

The Bureau of American Ethnology will concentrate its energies on a Kiowa camping circle, and this will be one of the most interesting features of the government's exhibits. The Kiowa Indians, together with an affiliated branch of the Apaches, have a highly elaborate social organization which is embodied and expressed in the grouping of their tepees and mode of camp life. All this will be exhibited in miniature and with great fidelity to nature. The exhibit will include all the objects of the handiwork of these Indians.

The National Zoological Park at Washington is to be reproduced with accuracy of detail in the form of a model about seven feet square, the work of a local modeler. Photographs of important features of the park, which is a very beautiful tract, including groups of animals, etc., will be shown.

The Bureau of International Exchanges, in the Smithsonian building, will exhibit a map of the world showing the number and location of its branches in all countries, these branches being in nearly every corner of the globe. One set of government documents will show the number of publications annually sent abroad, and this, together with a bound list of the foreign correspondents, will show how extensive are the bureau's activities.

The exhibit of the astro-physical observatory will be quite interesting, including, among other objects, photographs of the spectrum showing the progress of the observatory, photographs of apparatus, and the bolometer, the marvelous invention so invaluable to astro-physics. Prof. Langley's aerodrome, or air ship, will be shown only by photographs.

The exhibit of the United States Geological Survey will embrace two cases of minerals and a case of fossils. It will also include a suite of the rocks of the educational series. The last named is worthy of especial note. It is one of a number of duplicate suites, each consisting of 156 typical rocks which the Geological Survey has been preparing for a number of years, to be distributed to the great universities and colleges of the land for purposes of instruction. Its exhibition at Nashville will serve to announce its practical completion, as it will there be seen for the first time as an entirety. In addition to the above the survey will show twelve or fifteen relief models, most of them very fine, and a large collection of the topographic maps and geologic folios, as well as a number of transparencies and pictures of various kinds.

W. T. MORSELL.

BUSINESS CHANGES.

An elderly gentleman engaged in business for some twenty years past in New York and its vicinity, and which requires him to visit various lines of trade, said recently: "I find in the last few months that I am obliged to begin all over again. I go into a concern with which I have had dealings for years, and am surprised to find that the man with whom I have been transacting my business no longer sits at the desk. I ask for him and am told that he is no longer with the concern. Another, and in many cases a younger, man is there instead. It is almost like presenting my business anew. There is a perceptible interruption to relations, and an immense amount of new work to be done before I can get back to the position I occupied under the old management. This I meet almost universally. Some establishments have seized upon the present opportunity to rid themselves of dead wood. Others have hired cheaper help. Others have seen the opportunity of pensioning men long in their employ and superseding their somewhat old-fogy management by that of younger men up to date. Were I to tell you the number of cases in which these circumstances come to light, you would be astonished."—Business.

BAZIN'S ROLLER STEAMBOAT.

Dispatches from London, dated April 3, say that the reports of the recent trial trips of the roller steamer at Rouen have been discouraging, the engines not proving powerful enough. Their power was nearly trebled, but the increased weight submerges the rollers so deep that they only turn ten times a minute instead of forty. The rollers throw up such quantities of water behind that each acts like a brake and reduces the thirty knots an hour to six or seven. Rubber scrapers are being experimented with to prevent the upheaval of the water.