

TWO NEW SHIPYARDS.

THE PLANTS AT RICHMOND AND EAST BRAINTREE WHICH HAVE UNDERTAKEN LARGE GOVERNMENT CONTRACTS.

Among the numerous industries which of recent years have done so much to attract the attention of the world at large, and of Americans in particular, nothing has been so striking as the unprecedented development of the shipbuilding industry of the United States.

Immediately after the close of the Civil War the attention of investors, moneyed men and the political economists of the country was attracted to almost all other branches of enterprise rather than to that of the building of ships and machinery; but gradually, as wealth increased, as the National development took on new phases, it was seen that shipbuilding must take a prominent position in the country, and the erection of the three great establishments that now enjoy the confidence of the world was the result. Notwithstanding the difficulties attending the growth of a business of the dimensions required for the skillful and efficient construction of a big man-of-war, the moneyed men of the land at once took the matter under consideration, and by the time the first plans for a new Navy were elaborated the iron and steel mills of the country were prepared to enter into the evolution of homemade material required for the Navy which is now rapidly growing up.

THE TRIGG YARD.

One of the recent and notable instances of highly intelligent and energetic progress in the direction of hull and engine construction is the remarkable establishment of the Trigg company, at Richmond, which is beginning to attract attention all over the world. At first there was much amused curiosity that men could have the audacity to attempt shipbuilding so far in the interior of the South and above tidewater; but the wisdom displayed in selecting the site has been amply vindicated, and frank recognition is now given by capitalists and technical authorities to the demonstrated fact that natural advantages have been secured which give the new concern immense practical advantages over any shipbuilding plant in existence, with an enormous water power going to waste that can economically be converted into electricity, that ideal metal working force, with natural drydocks and with a large city of mechanics and skilled labor to depend upon.

With an experience gained during the construction of the engines and boilers of the United States steamship Texas, William R. Trigg, who was the principal agent in that excellent work for the Government, decided to enter the field of shipbuilding for the Navy, with the result that within the last two years there has grown up on the banks of the James River a plant capable of turning out work comparing favorably with the best in the country.

The new concern first appeared as a competitor for naval vessels in 1898, when the Government asked for bids for sixteen destroyers and ten torpedo boats, easily winning two of the first class and three of the second class. On November 16 of that year Secretary Long signed contracts with the Triggs for the 28-knot destroyers Dale and Decatur, at \$260,000 each—a figure \$20,000 each below the next lowest bid—and at the same time executed contracts with them for the 26-knot torpedo boats Shubrick, Stockton and Thornton, at \$129,750 each. From the start the young establishment showed its mettle with a vigor and skill that astonished older builders. The destroyers were launched in July, 1899, months ahead of the fourteen similar vessels under construction at other yards, and within the year the three torpedo boats were afloat. Naval inspectors pronounced the finish and workmanship of all five of these vessels superior to anything the Government had ever secured on the Atlantic Coast, and their tests proved that they were more strongly framed than the contracts required.

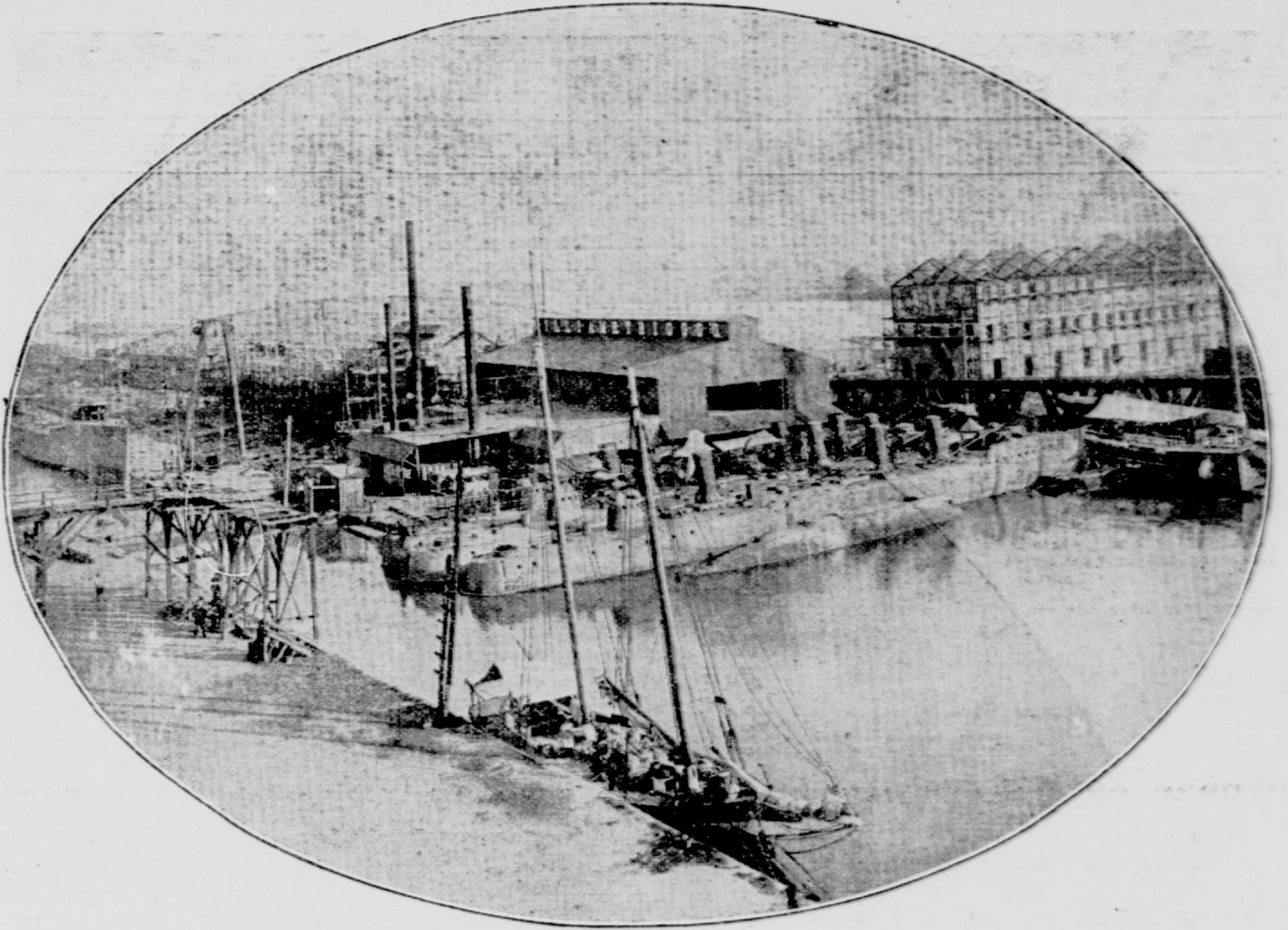
BUILDERS OF THE GALVESTON.

In December, 1899, the Trigg yard had sufficiently grown to warrant its managers in bidding for a 3,500-ton protected cruiser, and the Galveston was awarded to them for \$1,027,000, which was again \$20,000 under the price of the lowest bidders for six identical ships. This year the Triggs abstained from competing for the great 15,000-ton battleships and armored cruisers, but they have announced their intention of taking one of the large protected cruisers next February, and their yard will be ready for the heaviest battleships afloat in another year.

The works of the company are situated within the corporate limits of the city of Richmond, within less than half a mile of a practically unlimited source of electrical power for the movement of machinery, and with a waterfront equal to the launching of the largest types of warships required by the tremendous development of the naval field of view.

Important lines of railway pass in front of the shops; a climate which enables open air work to be carried on every month in the year and facilitates the prompt conduct of contracts bestows exceptional advantages upon the William R. Trigg Company.

The first craft turned out at these works, the torpedo boat Stockton, the first of her class to be completed, was successful on the first builder's trial, was reported ready for trial by the official Naval Board within ten days thereafter, was promptly tested by that Board over the



VIEW OF THE NEW SHIPYARD AT RICHMOND, VA.

Showing two destroyers, three torpedo boats and the submarine boat Plunger.

official course at Annapolis, and, to the surprise of the naval officers composing the Trial Board, was successful at the first attempt. She was accepted by the Navy Department within less than two months from the first time she was sent over a measured course under control of her builders. This is a record which has not been approached in this country or in England, the average time required for a torpedo boat to fulfil the requirements of the Government being from five months to a year.

THE FORE RIVER COMPANY.

Another competitor for laurels to be gained in the rehabilitation of the Navy is the Fore River Engine Company, of East Braintree, Mass., which recently established a large shipbuilding plant at Quincy Point for the purpose of building the two battleships for which the concern had received a contract. The plant consists of a group of machine shops, and beyond them, on a rising sweep of lawn, reached by a curved driveway, a large building with broad verandas. There is nothing imposing about the plant, and the passenger who leaves the train at Weymouth station would not suspect that a great shipbuilding industry had been started there.

The head of the concern and the master mind of the corporation is Thomas A. Watson, whose partner, Frank O. Wellington, was formerly an engineer in a factory at Bridgewater owned by Oakes Ames. An interesting feature about the Fore River concern is that it is not incorporated. Mr. Watson is looked upon as the company, and his partner and active manager is known as Mr. Watson's "discovery," just as Watson himself is said to have been discovered by Professor Alexander Graham Bell. Mr. Watson is about forty-seven years old, has no college education, and when sixteen years old went to work in a machine shop in Boston. The shop made electrical supplies a specialty, and one day in 1873 a man named Bell came to the shop to have a machine made with which to make experiments in multiple telegraphy. Young Watson was assigned to do the work, and from that time on he worked with Bell until he assisted him in putting up the first telephone line from the boarding house in Exeter Place, where they lived, to a building in Court-st., not far away. When the telephone ceased to be a toy and gained its place as a useful instrument Watson was made superintendent of the Bell Telephone Company, remaining at that post for eight years. Then he founded a company for the manufacture of engines to be used in electric lighting plants.

In speaking of the work which the company has undertaken Mr. Watson said:

We have never sought to do any political wire pulling nor exercise any influence of any sort, in order to get the contracts we have received, for none was necessary. The merit of our work and our manifest ability to carry out our contracts are all that secure us the contracts. Curiously enough, many people think we were the lowest bidders for the ships we received. We were not. In fact, we bid the limit. The Department was satisfied we were reliable and could do good work, and we got the contracts. That is all there is to it.

PUNISHMENT.

From The Washington Star.

"Did you say you were going to take the children shopping with you to-morrow?" asked Mr. Meekton as he wearily placed a large bundle of packages in the corner.

"Yes."

"Dear me! Have they been naughty again?"

FIRST AID TO THE INJURED

TRAINING A RELIEF CORPS IN A FACTORY.

DOCTORS ALMOST UNNECESSARY—AN INNOVATION WITH MANY ADVANTAGES.

Every now and then the newspapers publish directions for procedure in resuscitating victims of sunstroke, drowning, bad cuts, broken legs and other accidents and suddenly developed disorders. But when such emergencies arise the chances are that those who have mastered this advice are not on hand. And when they are, the accidents don't happen. There are exceptions to this rule, however. And one of them is the custom of having a volunteer "eye surgeon" in certain shops where flying bits of metal occasionally get into the men's eyes. The "eye surgeon" is not a trained medical man, but a workman, like those to whom he ministers. Still, by a combination of dexterity, nerve and experience, he is fitted to afford relief in trifling accidents of this sort, and the promptness with which he is able to render such service often saves a good deal of time and discomfort.

A scheme which may possibly have been an outgrowth of this, but which is much more elaborate and satisfactory, is outlined by "The Iron Age." It has been initiated by the managers of a manufacturing establishment whose precise situation and character are not specified. It appears, however, that it is far enough out in the suburbs of a city to prevent an immediate response to a summons for a physician, that fully six hundred men are employed there, and that the accidents which are most common are burns, cuts, falls, the crushing of hands or feet, injury to the eye from sparks or chips and heat prostration in summer.

The plan recently adopted at this establishment is to train a special relief corps, composed of about twenty men and distributed among the several departments, so that the most judicious, as well as the readiest, aid may be afforded in an emergency. The men who constitute the corps have been provided with the manuals of the Red Cross. Stretches are placed at convenient places. A room is set apart exclusively for surgical purposes, and only members of the relief corps carry keys thereto. This room is equipped with a leather covered couch, splints, bandages, lint and other appropriate articles.

When the scheme was first put into operation the manager held two drills a week for a month to ascertain how thoroughly the men had studied their manuals, and to familiarize them with the actual performance of their duties. The various emergency treatments likely to be required—lifting, carrying, bandaging, stopping the flow of blood with tourniquets and the restoration of consciousness—were conducted so as to test the proficiency of the corps. The idea that they were not to perform the more skillful work of an expert physician, but merely to do what was needed at the moment, was carefully inculcated, and a competition between the members was inspired by the offer of rewards. If a man was found to be lacking in calmness or carefulness he was dropped. The organization is a purely honorary one, but membership in it was eagerly sought.

When an accident happens now in this establishment the victim is attended by those mem-

bers of the relief corps who are in his department. Additional help may be summoned from the other departments, if necessary. The first step is to remove the injured person to the room set apart for this purpose, and if the trouble looks very serious a doctor is telephoned for. The management requests him on arrival to scrutinize the methods already employed, commending whatever has been done well and wisely, and pointing out wherein an improvement was possible.

A number of excellent results have been secured by this system. The requisite help in emergency is obtained sooner than has hitherto been practicable. In many cases it is quickly discovered by practised eyes that no physician is required at all. By removing the injured person to a separate room an end is quickly put to all excitement and the incident interferes but little with the operations of the shop. The workmen, realizing that the victim is being cared for, feel a sense of relief, and proceed with their ordinary duties serenely. These and other advantages possessed by this unique enterprise will commend it strongly to all who employ men in large numbers in labor attended with risk of physical injury.

While the project here outlined was under consideration, the desirability of having a drug store and a system of medical prescriptions for faintness, nausea and other maladies was suggested. This amendment to the plan was not deemed a wise one, however. The men themselves would not always know what they need. None of the relief corps were competent to tell. An error in prescription might be attended with fatal results, and, finally, this class of cases was less numerous and serious than those resulting from accident.

KING LEOPOLD AS AN AUTOMOBILIST.

Paris correspondence of The London Telegraph.

King Leopold's liking for automobilism has in nowise been lessened by His Majesty's adventure in the Bois de Boulogne, when he narrowly escaped being summoned for furious driving. The royal motorist is now constantly to be seen about in the twenty-four horsepower racing vehicle conducted by Charron, of Paris to Bordeaux fame, and once outside the limits of the capital and of the Bois, wherein King Leopold insists upon his driver keeping to a moderate pace, His Majesty indulges on deserted country roads in the intoxication of express train speeds. A sure sign that the King has become a thorough convert to automobilism has lately been noticed in his attire. His Majesty is taking to the special style of dress worn by French motor-men. Notably, he has definitely adopted "chauffeur" spectacles, with wire netting and side-pieces. At first King Leopold could not be induced to put these unbecoming goggles on. After some uncomfortable experiences of high speed travelling against the wind and on dirty roads he, however, determined to give the chauffeur spectacles a trial, and he has found them so satisfactory and comfortable that he now always wears them when motoring. King Leopold, in fact, has got so used to the goggles that he forgot to take them off the other day on alighting from his automobile, and some sensation was caused at the Elysée Palace Hotel, where he is staying, when His Majesty was observed in the hall still wearing a pair of most businesslike and voluminous chauffeur spectacles.

HE MAY.

From The Chicago Post.

"Hoke Smith thinks Bryan will leave the Democratic party," commented the Casual Caller.

"If he does," replied the Caustic Critic, "it will be for the same reason that the tenderfoot left the bucking bronco."

"Why was that?" asked the Casual Caller.

"It bucked," answered the Caustic Critic.