MARINE INTELLIGENCE.

THAT SCUTTLED WATER-PIPE.

A Few Unpleasant Facts for the Underwriters.

Who scuttled that water-closet pipe? This question is coming home to the schemers of that shallow invention to account for the sinking of the Board of Trade. It is astonishing how many people who ought to know better have been imposed upon by this tale of a closet pipe. The INTER-OCEAN never took any stock in the story that the Board of Trade was sunk by any leakage that could be made in her water-pipe, situated as it was so near the water line, and so close to the stern. In the first place, the vessel struck bottom at the notorious lime kilns in Detroit River, and thereafter she leaked. In the second place, she pumped freely from a leak in the forward end of the vessel, and when she sank went down by the head. In the third place, if water got in at the openings claimed to be found in the water-closet pipe, it was easy to see that it was unlikely to find its way forward to the pumps, but far more likely to work through the inside skin (or ceiling) near the stern, and so find its way into the cargo, and thus settle the vessel by the stern long before it could reach the head pumps. There are no water-courses cut in the frames in the wake of the water-closet pipe, these frames being stepped against the deadwood, and their heels coming so high up above the limber line. The ceiling over these frames is usually well fitted and kept tightly caulked, inside as well as outside. In vessels of a few years of age the dirt which accumulates between the timbers would materially hinder the passage of water between the timbers and the skin. The run of water toward the head pumps could scarcely be sufficient to supply an old-fashioned wooden pump, to say nothing of rushing along fast enough to keep a patent double pump well manned hard agoing and to fill the vessel with water in spite of the efforts of the crew.

Well, the proof of the pudding has come to our notice. How much water it takes to fill up the spaces between the frames where the water-closet pipe is situated, and partly fill those immediately adjacent, and whither the water runs after it should get through the pipe has been determined experimentally, and our views are completely confirmed. Just *one hundred and fifteen* pails of water were dipped up and poured into the water-pipe frame space, when it was filled—the man who drew the water over the vessel's side pouring it in as he drew it. For a time no water was seen to run in any direction, then it began to come out at the inner stern-post or deadwood under the transom, and it all ran into the vessel on the top of the ceiling, but not so fast as to prevent the experimenter completely filling the timber space of the water pipe. Had the place where the water issued into the hold been tightly caulked, no water at all to speak of would have found its way forward to the pumps, but all the water would have entered among the cargo, and could have been absorbed by it for a long time before it could have found a way to the pumps through the tight ceiling.

After this test the insurance inspectors and others who gave out that Captain Fountain had run away, or been sent to State's prison for scuttling the Board of Trade, ought to hide their heads in the slimy ooze of some of the canals around Buffalo. But they, no doubt, had masters to serve. Captain Fountain has just sailed on the bark Pensaukee for Buffalo, and our friends of the Canal City will do well to realize that they will see a brave and honest seaman when they behold him, if he was so unfortunate as to lose the Chicago Board of Trade and be maligned by people who want to save an insurance loss.

THE SAULT STE. MARIE LOCK.

An Account of an Important Enterprise Which Will Be of Interest to All Sailors and Vessel-Owners.

Work on this grand enterprise was commenced in the spring of 1873. The floor is now being laid, the excavation having been completed. The lock is 515 feet long by 80 feet in width in the chamber, and 60 feet at the gates, with 16 feet of water on the miter sills. Water is supplied by means of two box-culverts, extending the entire length of the lock, each eight feet wide by eight deep, with frequent openings two feet by six for the admission of water into the body of the lock. By this means the lock can be very quickly filled, and without "surging." The floor is of the most substantial kind; stringers or sills, consisting of timbers twelve inches square, are first laid lengthwise of the lock at intervals of ten feet, and are securely bolted to the solid rock underlying the whole structure. The space between these sills is filled with concrete composed of lime, water, crushed sandstone, and fine sand. Over this, and at right angles with the sills, are other timbers twelve inches square, placed in couples within four inches of each other, and securely bolted to the solid rock by bolts from five to eight feet long. The space between these timbers is filled with cement. Over the whole of this "foundation floor" are spiked two courses of three-inch plank, rendered as nearly water tight as possible. The mason work is not yet commenced, although the stone is being quarried and dressed, and will be partly delivered this fall. The stone for the facing is obtained at Segetown, Ill., and is shipped by water from Chicago. Stone for the "backing" will be obtained at some point on the St. Mary's River, probably at Lime Island. In the work of excavation some 30,000 cubic yards of stone and 90,000 of earth were removed. The cost of the lock will be in the vicinity of $600,000. This does not include the excavations and stone work above or below the lock. With the exception of some 500 feet of dredging the last-named work is not yet under contract. The entrance to the canals, the new and the old, will be, when completed, about 250 feet in width. Vessels will be able to pass through the new lock in less than half the time it takes to pass through the present double lock. Boyle & Roach, of Cincinnati, are the contractors having the work in hand. General Weitzel, United States Engineer, assisted by Messrs. Noble and Davock, are the engineers under whose supervision the work is being carried on. It will require some three years yet to complete the work; but when done it will be of the utmost importance to the commerce of the lakes.—*Cleveland Leader.*

A NOVEL YACHT.

Description of a Novel Yacht Recently Built Here—It Will Not Capsize Nor Founder.

Mr. A. B. Hoyt, of Warren, Ohio, has lately perfected a yacht, which, for novelty of construction, is ahead of anything ever built in these or any other waters. He has named it the Safety, and with what justness the name is given a glance at the following description will show: She has a double hull, 24 feet in length, a beam of 12 feet over all, and a depth of hold of 3 feet. The hulls are sharp at both ends, with concave sides, each being 4 feet beam. They are placed side by side four feet apart, and connected by two decks, the lower one, amidships being about half way between the keel and the upper deck, curving upwards at the bow and stern, and uniting with the upper deck. It also forms the floor of the cock-pit. Each hull is made water tight, and in shipping a sea, the cock-pit is the only place that can catch water. To clear out this water a scupper is built extending from the inside of the cock-pit to the outside of each hull. The rigging is the same as on ordinary yachts, having jibs, mainsail and topsail. The yacht is steered by two rudders fastened to the stern of each hull and connected on the deck in such a way that they can be turned by a single lever. The invention is designed to overcome the danger of capsizing (obviated by the use of the two hulls), and of foundering (obviated by the curved lower deck, helping the boat to rise quickly to a sea, and preventing running down by the head). As the weather boat serves as ballast, no weight of stone, metal, or any heavy article is needed; therefore, in case either or both the boats are stove or spring a leak, they will not sink, but will float quite a number of persons. The yacht was built at the yard of Messrs. Radcliff & Langell, of this city. During the last few weeks it has been quite thoroughly tested, and has proved itself to be all that was intended.—*Cleveland Leader.*

Good Enough.

They say that the propeller Oneida, of the Western Transportation Company's Line, is the champion floater on fuel bills. She made a round trip recently at a cost of $243, and on the succeeding voyage bids fair to reduce that sum by $30. The Oneida is an on-time "ten-miler," of about 1,100 tons burthen, has a snug compound engine in fine shape, and a "biler" that makes "fog" till you can't rest.

The Persian Burned.

An account of the burning of the steamship Persian will be found elsewhere.

The Ataunto.

A survey was held yesterday on the wrecked schooner Ataunto, the gentlemen holding it being W. W. Bates, the well-known shipbuilder, and Captains James Kehoe and Ben Eyster. Nothing is yet definitely known, but from the appearance of the vessel it is thought she will be abandoned to the underwriters.

Lake Freights.

Charters on 'Change yesterday were: To Sarnia—Prop Equinox, barge E. L. Mayes—corn on through rate. To Oswego—Schr D. G. Fort—corn at 4⅞c; schr Watertown—corn at 4⅞c. To Dunkirk—Schr A. G. Morey—corn and wheat on p. t. To Port Colborne—Schr Grantham—wheat at 2¼c. To Buffalo—Schrs E. Corning, Scotia, Z. Chandler—corn at 2c; schrs Lucerne, St. Lawrence, and Golden Fleece—wheat at 2¼c; schr O. Mowatt—corn at 2c; prop Mohawk—corn on through rate. Capacity—Wheat, 130,000 bu: corn, 285,000 bu.

In the afternoon the market was quiet at 2c corn to Buffalo. The schooner F. Berriman loads 47,000 bu of corn at 2c.

CLEVELAND, Ohio, Aug. 26.—Freights are firm at 75c free to Milwaukee and 80c to Chicago. Vessels are not very plenty.

BUFFALO, N. Y., Aug. 25.—Charters reported: Schrs T. P. Sheldon and Queen City, coal, Erie to Chicago, p. t.; schr Berlin, coal to Cleveland, 25c per ton. H. H. Smith reports schr W. S. Crossthwaite, 1,350 tons bulk salt