

Terror of Sailors Who ICEBERGS Sail the Northern Seas

Sailor Who Has Had Many Strange and Thrilling Adventures Spins Yarn of Vast Mountains of Floating Ice; Midnight Concert in the Gulf Stream—Hunting Bears on Drifting Floe—Magnificent Display of Aurora Borealis

CAPT. JOHN B. COFFIN of New Bedford and the Atlantic coast generally is a resident now of Los Angeles, and he says, "To live and die here." He has had many adventures in a busy life at sea and tells of his experiences with icebergs, those deadly foes of the unsuspecting seaman, in the following interesting fashion: Many and varied are the dangers of the ocean to the seaman, but the danger of collision with an iceberg is easily his greatest fear. It is not generally known that but for the great surface currents in the North Pacific and Atlantic this cause of trouble to the sailor could not exist. Icebergs are formed at the outlets of the many great glacial rivers of solid ice formed in the interior of Arctie fastnesses, beginning with perpetual snows, which in time are pressed and frozen and move onward, a few inches a day, till at the great outlet the glacier forms a barrier of solid ice, often a thousand feet in sheer height from the surface of the water, and in the case of the celebrated Muir glacier, two or three miles in width. So the Titanic forces urge the gigantic mass slowly toward the sea and the end of the ice river is forced out over the sea water, it loses its support, and when the washing of the sea has caused sufficient erosion at the base of the great frozen body a crumbling and detonating war is heard and then a final crash, such as no object on earth can make, and huge sections fall into the water and the iceberg is born.

Nature's Magnificent Effort I was one of a party of 250 excursionists on the steamer Senator from Seattle to the Muir and other glaciers in 1902, and when we got into Glacier bay, at the head of which this wonderful blanket of ice is located, it was a beautiful day in June and all the land and water was lighted by clear sun. Ahead of us appeared the square end of the great ice river some 900 to 1000 feet straight up from the water and fully a mile and a half wide. The sun's rays were centered on the white mass, burnishing it brighter than polished gold, and causing a sort of blindness to the observer, just as a glance at the sun does. Around us the water was smooth, and the great fringe of enormous pine and other forest trees so plentiful there, made a fitting frame for the beautiful picture.

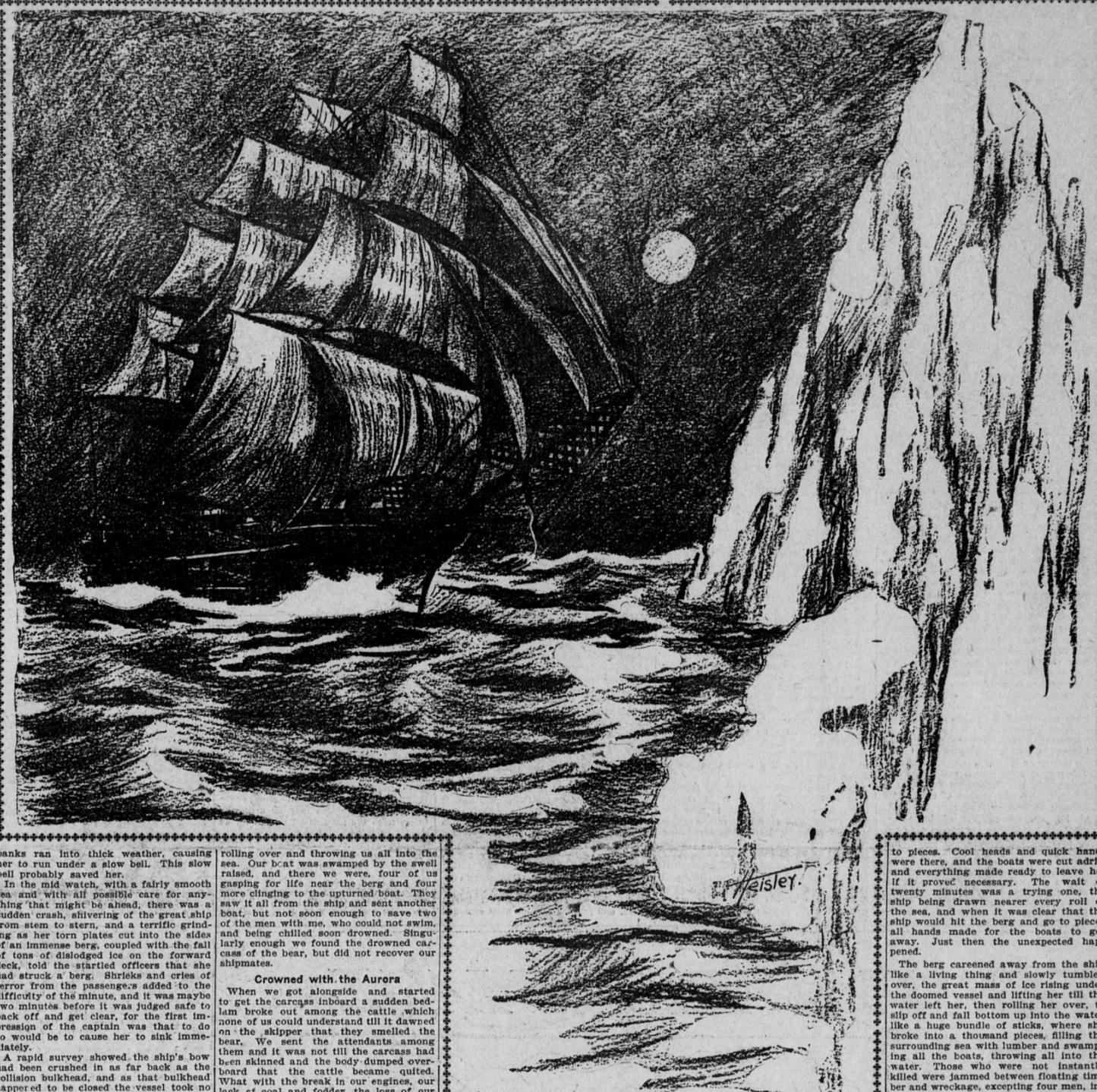
We steamed in till within a mile of the huge ice wall, and the closer we got to it the more the sun's light beautiful. The ship was one of the largest in that trade, but she was as a speck of dust to the size of the great ice barrier. We had viewed and photographed it in all possible ways and we had just recently heard of the Cross sound when a deafening roar called all hands from the tables, where dinner was being served. The roar was the usual preliminary to the fall of a berg and when the sound became prolonged and of the stupendous weight was gradually overbearing the resistance of the mass, a huge section broke off from the west side of the glacier with a report not unlike that of a great naval gun and rolled and lifted its several sides in the effort to find its equilibrium, and the play of sunlight on the rapidly shifting faces of the ice was grandly beautiful. One could picture turkeys, tin snips and domes of all the shades of the rainbow, and all enhanced in beauty by a sheen of polish that made it dazzling in brightness.

The fairy castles of youth were there with their huge facades, and the red and gold and silver decked oriel. Great palaces, arches and cloud-capped spires appeared and vanished as if by magic; the crowd of passengers being held speechless and in awe and wonder at it all. The density or gravity of freshwater ice is as 7 to 8 with that of sea water, and when the huge mass had settled itself its pinnacles were 200 feet in the air, and so an iceberg was born, mayhap the death warrant of some unsuspecting seaman.

Currents as Navigators On the Pacific side the Japanese or black current comes from the coast of that country in a general northeasterly direction floods the whole coast line of Alaska and the bergs which have their origin in the scores of glaciers which are to be found all over the coast north of 58 degrees latitude are imprisoned by its ceaseless flow. In the Gulf of Mexico there is a rare incident in the Pacific ocean, chiefly as all the paths of Pacific commerce are south of the great Japanese current and it forms a wale to ward the ice masses off.

The Atlantic coast the position of the great ocean highway is reversed, the current of the gulf stream being deflected northward and eastward, almost in the identical passage of the great steamships which ply between New York and Europe. The huge icebergs of the Atlantic, being formed in much higher latitudes, are vastly larger than those on the Pacific and some have been seen that covered two miles in length and of great height. The far Arctic reaches of Davis straits and Baffin bay and the eastern coast line of Greenland are the prolific sources of these monsters and the free action of the local currents brings them south till they cross the zone of commercial traffic and become the most beautiful and most fearful objects of the mariner's eyes. The eastern flow of the gulf stream forms an eddy at and around the banks of Newfoundland and their great theater of action is in and about that section.

Mechanical Ice Detective So deadly and so costly have the bergs proven to transatlantic passenger traffic, the great corporations are always in the market for mechanical devices to give notice of approach to icebergs, and several inventions are now in use, one of which, the thermostat, is a practical success. This is a contrivance fixed on the stem or forward part of the ship, and also on the forward bridge, so delicately arranged that at a fall of 10 degrees in temperature it will ring a bell, and if the fall is not an ordinary result of an obvious cause the officer of the watch knows a berg is near and governs himself and the ship accordingly. In July, 1888, the Atlantic liner Arizona, Capt. Hatfield, was on the westward run from Queenstown and on the edge of the



A LIFT IN THE FOG SHOWED US THE MIGHTY BERG

banks ran into thick weather, causing her to run under a slow bell. This slow bell probably saved her, for if it had not been for the fog, she would have been crushed by the berg. In the mid watch, with a fairly smooth sea and with all possible care for anything that might be ahead, there was a sudden crash, shivering of the great ship from stem to stern, and a terrific grinding as her iron plates cut into the sides of an immense berg, coupled with the fall of tons of dislodged ice on the forward deck, told the startled officers that she had struck a berg. Shrieks and cries of terror from the passengers added to the difficulty of the minute, and it was maybe two minutes before it was judged safe to back off and get clear, for the first impression of the captain was that to do so would be to cause her to sink immediately.

A rapid survey showed the ship's bow had been crushed in as far back as the collision bulkhead, and as that bulkhead happened to be closed the vessel took no water about it, for, although her plates in the vicinity of the bow were cracked and many rivets started, it was all over the load line. As she backed off from the treacherous berg and was again water borne, the submerged part of the berg struck her bottom on account of the swell, but did no damage. With her forward compartment full of water, putting the ship four feet by the head, she made the harbor of St. Johns without having injured a man or woman in the collision.

Hunting on an Iceberg I suppose you have often read of how ships go to sea, all fitted and manned in first class manner, and are never heard of again? Well, I have known several of these, and as I know the courses they made and the reason of the year they sailed in it is certain they have all icebergs and sunk in a minute after taking everybody down. There is no possible chance of a ship being wrecked on an iceberg, for a foot hold one would freeze to death in a short time. I recall the case of the cattle ship Arlaine with 2000 head of beef on the hoof, bound for London from New York. The ship was a British tramp steamer fitted to take the cattle, and had just enough English coal to make the passage. When she was four days out on the southerly track across something went wrong with her machinery, and they had to bank her and keep her head to the sea or her rolling would kill the cattle. It took more coal to keep up enough steam than the chief engineer counted on, and it caused them trouble afterward.

The break was in some vital part of the engines and they could not make a part to fit the break, so there was, actually adrift and provisioned with fodder for the cattle just enough to take them across in ordinary time. To make matters worse she was right in the path of icebergs on their southern trip, and they raised a huge field of ice the second night of their visit. The ship could barely make headway for fear of starting the broken machinery and was making some two or three knots. When they came near the great berg they saw something moving about on it, and when daylight came and the ship's engines were stopped against they lowered a boat and made for the berg to see what it was that had life in such a queer place. It proved to be an Arctic or polar bear, and it was so near famished that it could scarcely walk. The glasses showed it very large, and we determined to get the bear. We surveyed the berg for a possible landing place and found we could make it, so four of us got out on the ice, two with rifles and two with boat hooks. The bear was lodged on a rise on the outer end of the berg and seemed not to mind us or our approach. To get within gunshot of him and be where we could see him it was necessary to climb, and the work was hard. When we had got half way to the level of the bear a strange noise like the roar of a passing train was heard, and in an instant the great berg was rent in pieces, the part we occupied

rolling over and throwing us all into the sea. Our boat was swamped by the swell raised, and there we were, four of us gasping for life near the berg and four more clinging to the upturned boat. They saw it all from the ship and sent another boat, but not soon enough to save two of the men with me, who could not swim, and being chilled soon drowned. Singularly enough we found the drowned carcasses of the bear, but did not recover our shipmates.

Crowned with the Aurora When we got alongside and started to get the carcass aboard a sudden beam broke out among the cattle which none of us could understand till it dawned on the skipper that they smelled the bear. We sent the attendants among them and it was not till the carcass had been skinned and the body dumped overboard that the cattle became quiet. With the break in our engines, our lack of coal and fodder, the loss of our shipmates and a good boat, we were all in the dumps, and nothing is so conducive to blues at sea as a calm on a sniffling ship or a breakdown on a steamer.

The bursting of the iceberg left its gigantic fragments huddled together in a confused mass, and we thought no more of it till a quartermaster yelled out: "My God! Look there" while he pointed over the bow toward the berg. The scene beggars my descriptive powers. The aurora borealis was leaping high in the northern dome of the heavens and every fitful flash it made was reflected back by the ice mountain, now small enough to be easily moved by the sea, and it seemed that the great tongues of ghostly light had their origin in the berg and were only reflected in the north sky. Great red streaks, shooting about us with sharks, they tore the carcasses till the blood covered the water and then they tore each other. The shark is swift as a flash in the water, and we had a chance to see the faisty theory so generally believed that a shark must turn on its back to bite. These sharks, scores in number and averaging four feet in length, darted at each other as dogs would do and bit into and shook each other just as a terrier would shake a rat. They were shooting all around the ship like streaks of light, their presence easily followed in the phosphorescent water, and the battle continued till the last remnant of a carcass was gone, when they withdrew as swiftly as they came. We reasoned they had got the bodies of our shipmates and had collected in large numbers to fight over them, and when the beeves were thrown over they became frantic for blood. Old wharves say that when they are cutting in a whale the sharks crowd about to get cordings, and when one of the men with a blubber spade cuts a shark so he bleeds the others make short work of him, and after that sight I can believe it. We were four days after that in which we did not make fifty miles of distance, and were cheered the fifth day by the approach of the Magellan, another cattle ship on the same voyage for the same owners, which took us in tow and landed us without further mishap.

Impressed on Iceberg When I was a kid of a boy my father owned a fishing schooner in Provincetown on the coast of Massachusetts and made many trips with him. We were bound for Chaleur bay and left short of ice, expecting to find a berg and get all we wanted. This was a common practice then, but since the fishing laws have been changed this practice is dropped. In due time we made the Magellan islands and found ice all about us. We got under the lee of a large berg and landed six men with saws and axes and they would cut a chunk and roll it down to the boat. We were busy at this work when one of the sudden

to pieces. Cool heads and quick hands were there, and the boats were cut adrift and everything made ready to leave her if it proved necessary. The wait of twenty minutes was a trying one, the ship being drawn nearer every roll of the sea, and when it was clear that the ship would hit the berg and go to pieces all hands made for the boats to get away. Just then the unexpected happened.

The berg careened away from the ship like a living thing and slowly tumbled over, the great mass of ice rising under the doomed vessel and lifting her till the water left her, then rolling her over, to slip off and fall bottom up into the water like a huge bundle of sticks, where she broke into a thousand pieces, filling the surrounding sea with lumber and swamping all the boats, throwing all into the water. Those who were not instantly killed were jammed between floating timber and wreckage, excepting four men, including the mate, who clambered onto the after part of her, which was packed with lumber and could not sink, an all through the night they held a precarious foothold on this wreckage, momentarily expecting the berg to careen again and hurl them into the sea. As morning dawned a passing Quebec liner saw and rescued them and found that all other members of the crew were drowned.

Icebergs as Naval Targets The life of an iceberg rarely takes it south past the 20th parallel and a berg does not become a menace to all shipping for the reason that a common center, toward which ships from every clime tend, is the 500 miles square just off New York harbor. From north, south and east vessels come into this district and a berg about there is a grave danger. In 1869 a huge berg was so reported and the United States steamship Monongahela was dispatched to attempt to demolish it with her great eleven-inch smooth bore guns. There was difficulty in finding it, for the reason that all calculations made on anything else that floats are not applicable to an iceberg. Only one-eighth of it is out of water, and the seven-eighths submerged reaches frequently to an undercurrent and the berg goes directly against the surface current in consequence.

Naval men are expert navigators and found the berg. It was once an immense mountain of ice, but sun and water had graven the most fantastic forms on it, so much so that the ship's officers and men who had been in all lands and had seen all the noted architectural piles of earth, readily recognized some form they had seen before. At one end of the berg a great wall of ice stood and at this the guns were pointed. The first discharge of an eleven-inch shell hit fairly in the center of the wall, and owing to the mass being split and seamed by the sun's rays the whole wall fell apart as if by magical action and thousands of tons of huge ice blocks fell over into the sea, with deafening roar. The new surfaces and angles made were lighted by the sun and the officers reported it to be the grandest transformation ever known. So much weight was detached that the great submerged base tilted to side to gain equilibrium, the captain reported it "looked like a stupendous diamond in a sea of liquid silver and assumed all the forms and types known to classic architecture." The berg was then in 39 degrees 30 minutes, and about thirty miles east of Barnegat light, and had caught the full force of the northeasterly current of the gulf stream, and was followed by the ship for ten days and nights, and by the use of Costou's night signals vessels were warned of its presence till it was far enough off the land to be out of a beaten course and small enough to be of no great danger. In 1884 the ship Semiramis of Montreal, from Cardiff for Brooklyn with

Story of Death to Men Who Go Down to the Sea in Ships—Vessels Sail Away and Are Never More Heard from—Victims of Collisions with Icebergs Struck in the Night—Nature's Monster Derelicts Worst of All Perils of the Deep.

steel blooms, Captain Jeffords, was working over the banks in very thick weather. The writer was an officer on her and had been, with the crew, worn out by constant punishment. Although she was a brand new vessel, she was making her maiden voyage without copper sheathing, as it is deemed best to have a vessel set well together to avoid the wrinkling in her sheathing sure to come if it was done when she is on the stocks. The great dead weight of her cargo strained her frame in the heavy seas we met, and when we got on the banks every officer and man was worn out. We knew the danger of icebergs, but we were not on guard, and in the incessant toil at the pumps became careless. A lift in the fog showed us a mighty berg not a half mile away and right in our path. With the helm up and the sheets off, we soon pointed to leeward and slowly crawled away from collision, only to find ourselves under the lee of the huge mountain and becalmed. The fog shut in again, and we could hear the wash of the sea on the base of the berg and were helpless. There are always large masses of floating ice in the lee of a berg, being detached from time to time and being in position by the undertow. Our canvas was slatting idly against the spars, and I had sent two men out to stow the jib. I could not see them for fog, but in less than a minute they came yelling on deck, saying we were on the berg. It was a great cake of small berg, and in a few minutes it was under the bows, and we cut our jolly boat adrift from the house amidships and got her over the side as the only step we could take.

Rushing to the bow, we could just make out the form of the danger and hoped it would pass us. We were drifting closer to the main berg, we knew by the increased roar of the wash about its base, and we knew if she ever struck she would go to pieces at once. The ordinary cargoes of a steamer are always present in fact of dangers they are used to, but this combination of night, unseen danger and certain death unmanned most of the men and they made for the boat. Just then the small berg lurched toward us and struck us under the starboard bow, crushing in the forecastle head and knocking the starboard anchor, lashed on the deck, overboard, tearing away the bulwarks aft to the fore rigging. We jumped to the main deck and all hands got into the boat, crowding her so that room to move was scarce, and pulled off some five hundred yards to await daylight and what it might bring to us. The sea was comparatively smooth but the night was bitter cold, and it was worse from the fact that every man of us was wet to the skin. Our hope was that the ship might drift clear of the berg and we could save her. Our fear was she would hit the berg and instantly sink.

Prayer in Night Watch Our crew was the ordinary pickup of the maritime citizen and profanity was a habit. The freezing men damned everything in general and that berg in particular, till weary with cursing, they settled into a dogged silence. Then through the roaring of the sea and the banging and clanging of the sails and gear of the ship, I heard a voice I recognized as that of "Tipperary," he was known among us, repeating the "Hall, Mary," of the church service. That crowd of sailors were struck dumb by the sound of his voice, and there was a fervency in the appealing tone that challenged awe. Somewhere in the backwoods chapel in youth he had learned this prayer, and the conviction of helplessness and impending death had brought it to his mind now up through the case-hardened years of a Liverpool Irishman's wicked and lawless life, and, strange to say, the men who would have mercilessly jeered at him under other conditions remained mute.

Chanty in Midcocean Judging our position in the direction of the sound, we kept a safe distance off and just suffered. The hearts of sailors are usually in the right place, and when the long watch brought renewal of the crash and clatter of gear on the ship, one man started to whine the old chanties of the forecastle. Soon another took it up and the chorus of: "A Yankee ship came down London river— Blow, boys, blow, O! A Yankee ship came down London river— Blow, boys, bully boys, blow!"

and among the most vociferous in the strain was the stentorian howl of "Tipperary," who had recently sought the Virgin Mary to intercede for us. Fear fits in the coming of the magnetism of courage in man's heart, and the songs brought out a resourcefulness and courage, and if any arctic denizen had happened to be located on that berg it must surely have been startled at the snap and vigor of that midnight concert.

As it grew toward daybreak the cold was intense and we had difficulty in keeping the boat head to the sea, and it was with straining eyes and longing hearts that we all looked toward the berg. If she had stood the night out we might yet board her; if she was gone our chances were small.

Rescue at Daybreak One of the men thought he saw a light to windward and soon all eyes were in that direction and all sail. In a moment all was action and we pulled toward that light for dear life. Once clear of the berg we had a very nasty sea to meet and in the darkness we feared the vessel would not see us. We pulled and yelled and yelled and pulled desperately. The day was breaking and to our great relief she saw us and blew her whistle to let us know the fact. Half frozen and disheartened as we were the sound of that steam siren was the sweetest we ever heard. To cheer us more we could see the Semiramis was yet afloat and held away from the side of the great berg by the smaller one.

Our relief soon came up and proved to be the Donjon d'Orleans, a Marthabash with passengers for St. Johns. We were all helped aboard and when warmed and fed she put us near our ship, which we all boarded and found to be completely wrecked as to spars and sails, but with no more water in her than she would have made if we had not pumped her for the same time. We soon got a line to the Marthabash and she took us into St. Johns, a port that has often received derelicts of the sea and pulled in desperately. In 1884 the ship Semiramis of Montreal, from Cardiff for Brooklyn with