

III.—REPORT ON THE WORK OF THE UNITED STATES FISH COMMISSION STEAMER LOOKOUT FOR THE YEAR ENDING DECEMBER 31, 1884.

BY MATE JAMES A. SMITH, U. S. N., COMMANDING.

On January 1, 1884, by order of the Navy Department, I was detached from duty on the U. S. Fish Commission steamer Fish Hawk and ordered to assume the command of this vessel, the Lookout. The vessel was then on the marine railway at the navy-yard, Washington, D. C., undergoing extensive repairs, the superintendence of which I took in charge, under instructions from time to time from Assistant Commissioner T. B. Ferguson. On April 30 the vessel was launched, and on May 17 got up steam and made a short trial trip down the river as far as Fort Washington and returned to the navy-yard. Machinery worked well, but found some slight alterations were required to perfect the vibration of the cylinders.

May 29, at 5.45 p. m., left navy-yard, Washington, D. C., with Assistant Commissioner T. B. Ferguson on board, bound to Saint Jerome Station, Maryland,* arriving there at 12.10 p. m. of the 30th. Took on board a small boiler and returned to navy-yard on the 31st, arriving there at 5.30 p. m.

June 7, Assistant Commissioner T. B. Ferguson came on board. Got under way from navy-yard at 5.30 p. m., and proceeded down the Potomac River, with launch No. 68 in tow, bound to Saint Jerome Station; arrived there at noon of the 8th, and delivered the launch to the superintendent of the station; at 3 p. m. proceeded up Chesapeake Bay, bound to Battery Station, Havre de Grace, Md., arriving there at 9.15 a. m. of the 9th. Assistant Commissioner Ferguson left the ship. At 3.30 p. m. left Battery Station with a seine-boat in tow bound to Saint Jerome Station, arriving there at noon on the 10th; delivered seine-boat to the superintendent of the station, and at 3 p. m. left the station and proceeded up the Potomac River to navy-yard, Washington, D. C., arriving at 8.30 a. m. of the 11th, and continued the refitting.

June 21 Assistant Commissioner T. B. Ferguson came on board; at 5.20 p. m. left navy yard and proceeded down the Potomac River, bound to Saint Jerome Station, arriving there next day, and returned to navy-yard, Washington, D. C., at 6 p. m. of the 25th.

June 27 left navy-yard at 5.45 p. m., with Assistant Commissioner T. B. Ferguson on board, bound to Saint Jerome Station. Communicated with U. S. Fish Commission steamer Fish Hawk, in Cornfield Harbor, Point Lookout, Md., on the 28th, and returned to navy-yard, Washington, D. C., at 8.30 a. m. on the 29th.

July 3, by order of the Chief of Bureau of Steam Engineering, a board of four engineer officers of the Navy came on board in order to test the working of the machinery and speed of propeller. At 8 a. m. got under way from navy-yard and proceeded down the river; made three round trips from Geisborough Point to Marshall Hall, and returned to navy-yard at 4.40 p. m.; made fast to wharf; carpenters and plumbers at work until the 9th.

July 10, at 5.30 p. m., left navy-yard, with Assistant Commissioner T. B. Ferguson on board, and proceeded down the Potomac River, bound to Saint Jerome Station, arriving there at 10 a. m. on the 11th. Assistant Commissioner went on shore and inspected the station. On July 13, at 8 a. m., got under way and steamed across the bay, bound to Crisfield, Md.; arrived there at noon. Left again at 1 p. m., and proceeded down Tangier Sound and Chesapeake Bay to Cherrystone, Va., arriving there at 6 p. m. July 14 left Cherrystone at 8 a. m., interviewed pound-net fishermen in regard to Spanish mackerel as far as Fishermen's Inlet, then proceeded to Hampton Roads, Virginia, arriving at 3 p. m. July 15, during forenoon, steamed up to Norfolk, Va. Coaled and watered ship. Took on board a steam-pump and some lumber for Saint Jerome Station. July 16 got under way at 8 a. m., bound to Saint Jerome Station, arrived there at 5.30 p. m., delivered steam-pump and lumber to superintendent of station. July 18 left Saint Jerome Station, proceeded up the bay, bound to Baltimore, Md.; arrived at noon of the 19th and came to anchor.

July 25 Assistant Commissioner T. B. Ferguson came on board. At 3.30 p. m. left the harbor and proceeded down the bay, bound to Saint Jerome Station; arrived there at 3 p. m. on the 26th. July 27, at 5 a. m., got under way and steamed down the bay, bound to Hampton Roads, Virginia. At 2.30 p. m. arrived and anchored in Hampton Creek, Virginia. July 28 got under way at 6 a. m., steamed across Chesapeake Bay and examined all the pound-nets between Fishermen's Inlet and Hungers Creek. At 4.30 p. m. anchored in Cherrystone Inlet, Virginia. July 30 left Cherrystone Inlet and steamed across the bay, bound to Hampton Roads; while on the way over lost one blade of the propeller. At 4.30 p. m. arrived at Norfolk, Va., and made fast to wharf of W. A. Graves, and prepared ship to be hauled out on marine railway. August 1 ship was hauled out on Graves's marine railway and put on spare propeller.

August 2, at 7.30 a. m., launched ship. United States local inspectors came on board and examined boiler; got a cold-water pressure of 115 pounds. At 4.45 p. m. proceeded down Elizabeth River and anchored

in Hampton Roads, Virginia. August 3, at 11.30 a. m., left Hampton Roads, Virginia, bound to Saint Jerome Station; arrived there at 7 p. m. August 4, at 6 a. m., got under way bound to navy-yard, Washington, D. C., arriving at navy-yard at 4 p. m.

August 5, by order of the Chief of Bureau of Steam Engineering, a board of four engineer officers of the Navy came on board to test the working of the engines and speed of the vessel with the spare wheel put on at Norfolk, Va. At 4.45 p. m. returned to navy-yard.

August 6 left navy-yard bound to Saint Jerome Station; and arrived at 10 a. m. on the 7th. August 8 got under way from Saint Jerome Station and proceeded down the bay, bound for New York. At 7 p. m., anchored in Hampton Roads, Virginia; wind squally and strong from NE. From August 8 to 15 were wind-bound in Hampton Roads, Virginia. At 3.45 a. m. of the 15th proceeded out of Hampton Roads, Virginia, bound to Delaware Breakwater. At 11.30 a. m., when about 10 miles off Chincoteague light-house, lost one blade of the propeller. Returned to Norfolk, Va., arriving there at 8 a. m. on the 16th. From August 16 to 21 were waiting to go on marine railway. At 1 p. m. of the 21st hauled vessel out on Graves's marine railway and put on a new propeller received at navy-yard, Washington, D. C. August 22 launched ship, steamed down to Hampton Roads, and anchored at 5 p. m. August 23, at 9.30 a. m., left Hampton Roads, Virginia, bound to New York; arrived there at 4 p. m. of the 24th.

August 25, at 4 p. m., Assistant Commissioner T. B. Ferguson came on board. Got under way and proceeded up East River bound to Wood's Holl, Mass., stopping at New London, Conn., and Newport, R. I., *en route*; arrived at Wood's Holl, Mass., at 6.30 p. m., August 28. August 30, at 8.30 a. m., left Wood's Holl bound to New Bedford, Mass. At 3.50 p. m. returned to Wood's Holl with spar in tow for use at the Fish Commission station.

September 3, at 9 a. m., Prof. G. B. Goode and scientific party came on board. Left Wood's Holl and steamed out to No Man's Land, made several hauls with the dredge, and spent some time fishing for sharks. At 5.15 p. m. returned to Wood's Holl.

September 5, at 10.15 a. m., left Wood's Holl bound to Mattapoissett, Mass., with Assistant Commissioner T. B. Ferguson on board; arrived there at 11.30 a. m. General W. T. Smith came on board, and after some time spent in conference and examination of plans of work at Battery Station, Maryland, returned to Wood's Holl, arriving there at 6.30 p. m. From September 6 to 10 were engaged in painting and cleaning ship.

September 10, at 9.25 a. m., got under way from Wood's Holl bound to New York; arrived there at 5 p. m. on the 11th. Reported for duty to E. G. Blackford, fish commissioner of the State of New York, to assist him in making an investigation of the oyster-beds in Long Island

Sound, Prince's Bay, Kill von Kull, and Hudson River; made daily trips to these points, and was engaged on that duty until September 25.

September 26, at 8.45 a. m., left New York and proceeded to Patchogue, Long Island, to assist Dr. Tarleton H. Bean in making a collection of fishes in Great South Bay, the vessel being used to transport his party from point to point. Arrived at Patchogue, Long Island, at 5.30 p. m. Was engaged on the above duty until October 7.

October 8 left Patchogue, Long Island, at 5 a. m., bound to Wood's Holl, Mass., arriving there at 9 p. m. October 9, 10, and 16 engaged with vessel in towing scow to Tarpaulin Cove and back, with gravel for grounds at station.

October 17, at 7.30 a. m., took steam-launch Cygnet and cat-boat Edna in tow, and proceeded out of the harbor bound to Battery Station, Havre de Grace, Md., *via* Long Island Sound to New York, thence by Raritan and Chesapeake and Delaware Canals, stopping *en route* at New London, Conn., New Brunswick, N. J., Bordentown, N. J., and Delaware City, Del.; arrived at Battery Station at 1.30 p. m. of October 23, and delivered launch Cygnet and cat-boat Edna to superintendent of station. At 1.45 p. m. left Battery Station and proceeded down Chesapeake Bay bound to Baltimore, Md. At 5.15 p. m. arrived and made fast to Clark's machine-shop wharf. October 23 to 29 engaged in making some necessary repairs to boiler.

November 2, at 10.30 a. m., left Baltimore, Md., bound to Battery Station, arriving at that place at 2.45 p. m. November 4 got under way from Battery Station at 6 a. m., and proceeded to Baltimore, Md., arriving there at 10.30 a. m.

November 5, at 6 a. m., left Baltimore, Md., proceeded down the bay bound to Saint Jerome Station; at 8.20 a. m. put into Annapolis, Md., and took on board Assistant Commissioner T. B. Ferguson, arriving at Saint Jerome Station at 4.30 p. m. November 6, at 6 a. m., got under way from station and steamed across the bay bound to Crisfield, Md.; arrived at 9 a. m., and communicated with U. S. Fish Commission steamer Fish Hawk. November 7, at 8 a. m., got under way and steamed out to the oyster-bed in Tangier Sound and made several hauls of the oyster dredge on the natural beds to ascertain the quantity of oysters and shells dredged up over a measured distance. U. S. Fish Commission steamer Fish Hawk was at work in the immediate vicinity. At 5 p. m. finished dredging and returned to Crisfield, Md. November 8 left Crisfield, Md., at 7.45 a. m. bound to navy-yard, Washington, D. C., arriving there at 9.40 a. m. of the 9th.

November 11 took on board a new composition propeller. At 9.45 a. m. left the navy-yard and proceeded down the river, bound to Baltimore, Md. At 2.30 a. m. of the 12th the disabled schooner American Coaster asked for assistance. Took her in tow opposite Annapolis and proceeded for Baltimore, Md.; arrived there at 10.30 a. m. At 11.30

hauled ship out on William Skinner's marine railway, and put on new composition propeller, received at navy-yard, Washington, D. C.

November 13 launched ship, and at noon left Baltimore, Md., bound to Battery Station, Havre de Grace, Md. November 15, at 6.30 a. m., left Battery Station with lighter in tow bound to Saint Jerome Station. At 5.30 p. m. arrived and delivered lighter to superintendent of station. November 16 started from Saint Jerome Station bound to Baltimore, Md.; arrived at 2.30 p. m.

November 17, at 2 p. m., Assistant Commissioner T. B. Ferguson came on board. Steamed out of the harbor and proceeded down the bay. At 9 p. m. anchored in Patuxent River, Maryland. November 18 got under way at 7 a. m. and proceeded down the bay, passed the U. S. Fish Commission steamer Fish Hawk, at work on oyster-beds in the vicinity of Saint Jerome Creek. At 2.30 p. m. anchored in Smith's Creek, Maryland. November 19, at 11.45 a. m., left Smith's Creek and proceeded across the bay bound to Crisfield, Md.; took soundings on oyster-beds in Tangier Sound in the vicinity of Kedges Straits. At 4.30 p. m. anchored in Crisfield Harbor, Maryland. November 20 got under way from Crisfield, Md., at 2 p. m.; proceeded up Tangier Sound and through Hooper's Straits. Came to anchor in Patuxent River at 6.20 p. m. November 21, at 6.10, got under way and steamed down the bay to Saint Jerome Station. Received on board three steam-pumps for transfer to Battery Station. At 9.40 a. m. left Saint Jerome Station bound to Battery Station, Havre de Grace, Md. At 2.15 communicated with U. S. Fish Commission steamer Fish Hawk, coming down the bay. At 8.15 p. m. arrived at Battery Station. Assistant Commissioner T. B. Ferguson left the ship. November 22 to December 1, at Battery Station having extension built to deck-house to be used during the coming spring as a hatching room. December 1 to 3, were engaged in towing lighter to and fro from Havre de Grace, Md., with coal for Battery Station. December 3 to 23, at Battery Station, finishing deck-house. December 18 to 23, bay completely frozen over.

December 23, at 8 a. m., left Battery Station bound to Baltimore, Md. Succeeded in cutting a track through the loose ice and at midnight anchored at Turkey Point. December 24, at 6.45 a. m., steamed ahead through an opening in the ice, and arrived at Baltimore, Md., at 11.15 a. m. From December 24 to 31, made fast to Waters' wharf, Baltimore, Md.

STEAMER LOOKOUT,

Baltimore, Md., December 31, 1884.