

In Navigation.—A second mate will be required to find the time of high water at a given port; to observe and calculate the amplitude of the sun, and to find the error of the ship's compass therefrom, and also the deviation, the variation being given. He must also be able to find the daily rate of the chronometer from error observed, and to find the longitude by altitude of the sun by the usual methods.

An only mate will be required to find the true bearing of the sun, and the error of the ship's compass from an observed azimuth of the sun, both from an altitude and also from the "time azimuth tables," and with the variation given compute the deviation; to find the latitude from a single altitude of the sun off the meridian, and also to ascertain the true bearing of the sun and the ship's position by Sumner's method by projection. He must also be conversant with the use of Mercator's chart, and be able to find, on either a *true* or *magnetic* chart, the course to steer, and the distance from one given position to another; to find the ship's position on the chart from cross bearings of two objects; from two bearings of the same object, the course and distance between the bearings being given; and also to find the distance of the ship from the object at the time of taking the second bearings.

A master will also be required to find the true bearing of the sun from the "time azimuth tables," and with the variation given compute the deviation, and work out the same problems on either a *true* or *magnetic* chart, as are required from the only or first mate. He will also be required to find the course to steer by compass, in order to counteract the effect of a given current, and to find the distance the ship will make good towards a given point in a certain time, and to *work out practically* the correction to apply to soundings taken at a given time and place, to compare with the depth marked on the chart.

APPENDIX.

The following appointments have been made since the foregoing sheets went to press:—

CUSTOMS' DEPARTMENT.—James Jardine, to be examining officer, in Her Majesty's Customs, St. John's.

ROAD BOARDS.—Edgar March, Chas. Crocker, Samuel Metcnam, Hezekiah Burt and Absalom March, to be a Board of Road Commissioners for Green's Harbor, Trinity Bay.

Levi Burt to be a member of Old Perlican Road Board in place of Henry Hopkins, deceased.

Rev. J. J. Curling, Alexander McKenzie, Laurence Barron, W. H. Bagg, Alexander Petrie, and John Hayes, to be a Road Board for the Bay of Islands (Southside).

Thomas Carter, Christopher Fisher, Edward Brake, Dan. Reddy, and John Barry, to be a Road Board for the Bay of Islands (Northside).

Thomas Rowsell, Benjamin Rowsell, George Marsh, Noah Cheppett, Joseph Hagggett, John Ward, Uriah Martin, and Thomas M. Silk, to be a Board of Road Commissioners for Leading Tickle, Bay of Notre Dame.