N. Latitude.	Liquid Fraction.	S. Latitude.	Liquid Fraction.
60°	0.353	0°	0.771
50°	0.407	10°	0.786
40°	0.527	20°	0.777
30°	0.536	30°	0.791
20°	0.677	40°	0.951
10°	0.710	50°	0.972
0°	0.771	60°	1.000

The extreme terms, from 60° to 50°, are doubtful on account of the polar ice; but the table, as a whole, shows the regular expansion of the liquid surface from north to south. If, then, the depth of the waters increased with the increase of their area, it would be very perceptibly augmented towards the southern pole. There should exist, moreover, a *thalweg*, or line of greatest depression, in the basin of each of the three great gulfs formed by the Atlantic Ocean, the Pacific, and the Indian Sea, and these three lines, which M. Adhémar supposes situated at equal distances from the two shores of each ocean, would reunite at a point within the great ice-desert of the southern world.

Everything, then, leads us to believe that the depth of the sea is prodigious in the regions contiguous to the Antarctic Pole. Captain Sir James Ross paid out 4000 fathoms of sounding-line in 68° south latitude, without reaching the bottom. Captain Denham, of the *Herald*, struck the ground at 45,800 feet in the South Atlantic; but Lieutenant Parker, of the American frigate *Congress*, having sounded in the same locality, got rid of 50,000 feet of rope, without obtaining any indication of having reached the bottom.

These experiments have been made with the sounding-apparatus uniformly adopted in the American marine. Every vessel of the United States receives, on demand, a quantity of rope, 10,000 fathoms long, marked at every hundred fathoms. To these are attached leaden balls weighing 32 to 38 pounds, which are heaved overboard from a boat, the rope being left to unroll itself, and the pulley revolving with facility. Experiments conducted in this fashion had met with so many difficulties, that it became evident these must be conquered before any reliable deep-sea soundings could be taken. Spite of all the precautions adopted by Captains Denham and Parker, it was impossible for scientific men to accept their results, because it was known that the rope continued to uncoil, under the action of submarine currents, even after the bullet had reached the bottom.

At present the ordinary sounding-line is employed with some success, its indica-

http://www.geology.19thcenturyscience.org/books/1870-Figuier-Adams-EarthSea/README.htm