



FIG. 1.—Diagram constructed from Serial Sounding No. 59.

21' W., in 1500 fathoms, with the usual gray-white chalky bottom which surrounds the reefs. A serial temperature sounding indicated a distribution of temperature very similar to that at Station LV. to the north of Bermudas; the warm band to a depth of 350 fathoms was still very marked (Fig. 1).

Our position at noon on the 15th was, lat. 33° 41' N., long. 61° 28' W., 1610 miles from Fayal.

On the morning of the 16th we sounded in 2575 fathoms, with a bottom of reddish ooze containing many foraminifera. The bottom temperature was 1°·5. A small, rather heavy trawl, with a beam 11½ feet in length, was put over in the morning; but when it was hauled in, about five in the afternoon, it was found that it had not reached the bottom. This was the first case of failure with the trawl; it was probably caused by the drift of the ship being somewhat greater than we supposed. The net contained a specimen of one of the singular and beautiful fishes belonging to the *Sternoptychidae*, an aberrant family of the *Physostomi*, distinguished by having on some part of the body ranges of spots or glands producing a phosphorescent secretion. The surface of the body is in most of the species devoid