

## STATION 100.

At 1.30 P.M. shortened and furled sails, and got up steam to sound. Sounded in 2425 fathoms. Attached dingey by line, and sent cutter away to try current, which was running at the surface at the rate of half a mile per hour eastward. At 3 P.M. obtained serial temperatures down to 1500 fathoms. The carbonic acid was determined in the surface water, and amounted to 43.2 milligrammes per litre. At 4.30 P.M. picked up line from dingey; line carried away in heaving in, and a thermometer was lost. At 5 P.M. cutter returned. At 6.20 P.M. completed temperature observations, and at 6.30 P.M. made all plain sail. At night sea phosphorescent.

Distance at noon from St. Paul's Rocks, 879 miles. Made good 145 miles. Amount of current 28 miles, direction S. 45° E.

ORGANISMS FROM  
SURFACE-NETS.

**Surface Organisms.**—The following species are recorded from the surface in this locality:—

## SCHIZOPODA (Sars, Zool. pt. 37).

*Euphausia pellucida*, Dana.

„ *gracilis*, Dana.

## NUDIBRANCHIATA (Bergh, Zool. pt. 26).

*Phylliroë atlantica*, Bergh.

*Acura pelagica*, Adams.

## PTEROPODA (Pelseneer, Zool. pt. 65).

*Cavolinia uncinata* (Rang).

## TUNICATA (Herdman, Zool. pt. 76).

*Pyrosoma atlanticum*, Péron.

„ *giganteum*, Lesueur.

## FISHES (Günther, Zool. pt. 78).

Young Pleuronectids.

*Leptocephalus morrisii* (young).

Willemoes-Suhm writes: "The sea was more luminous than ever, due chiefly to the presence of innumerable specimens of *Pyrocystis*, which made the water quite yellow. Foraminifera were also very abundant, and *Peridinium* (*tripos* and another species), which is known to cause phosphorescence when in great quantities, was present. Copepods, *Squillerichthus*, and various other Crustacea, were taken in the tow-net, making it quite slimy when hauled in. I think that *Corycaeus*, *Acura*, *Pneumonoderma*, *Cranchia*, and the Pleuronectids do not belong to the North Atlantic surface-fauna, but that we have now entered within the limits of the South Atlantic fauna."

August 16, 1873.

The phosphorescence was not so brilliant, and the tow-net procured only some *Pyrocystis*, Foraminifera, and a few Crustacea. Some large sea-birds with white plumage (*Sula fusca*) were soaring about, keeping very close to the water; they were not following the ship, but fishing.