

affords many other examples ; the distribution of temperature in the remarkable Agulhas Current, for instance, is explained in this way.

The Norwegian coast-current presents a good example of the effect of the earth's rotation on the inclination of the water-

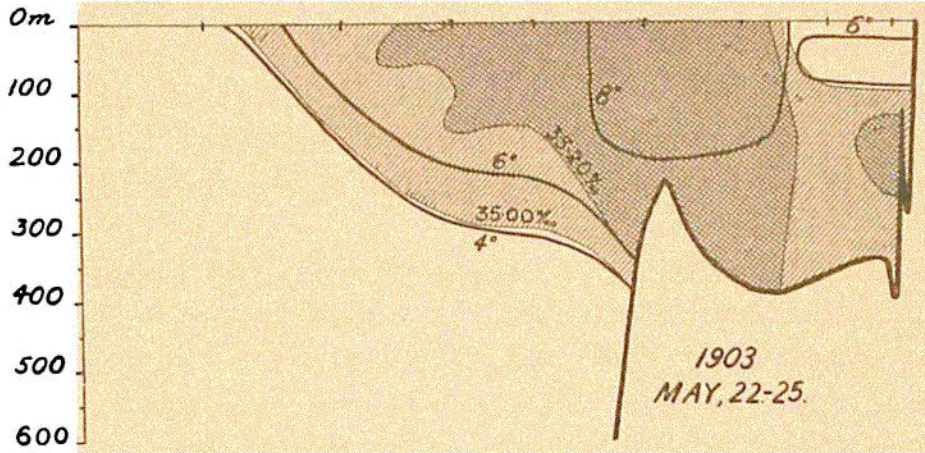


FIG. 187.—THE SOGNEFJORD SECTION IN MAY 1903.
(Fig. 165 shows the same section in May 1904.)

layers. Fig. 187 shows the conditions in May 1903 along a section through the Norwegian Sea from the mouth of the Sognefjord to the west; on the right, close to the land, the coast-water attains a depth of about 100 metres. By heating in the course of spring and summer this water becomes lighter

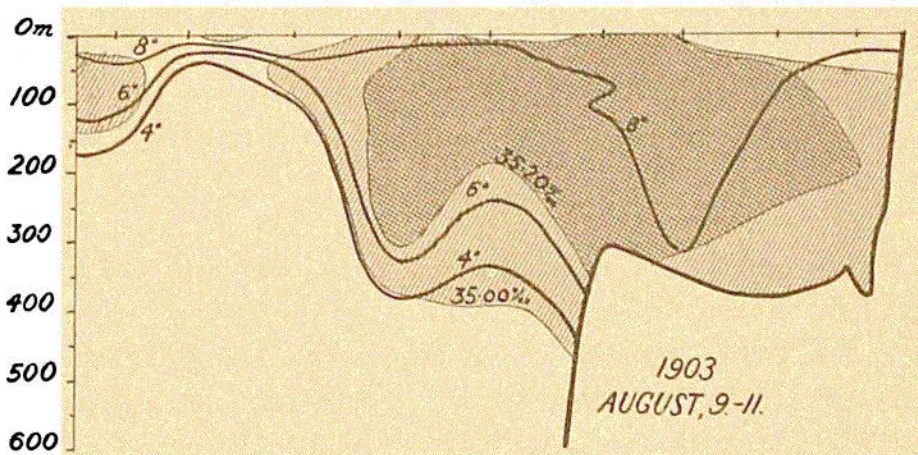


FIG. 188.—THE SOGNEFJORD SECTION IN AUGUST 1903.

and acquires a greater tendency to spread over the surface. This tendency counteracts the deflecting force of the earth's rotation, and finally causes the surface-layers to extend towards the west, becoming less thick in proportion. Fig. 188 shows the conditions along the same section in August 1903, when we repeated the investigations. The coast-water now lay much farther from the land than in May, reaching only to a depth of