

(per cent) from the normal annual rainfall, (II.) for Christiania, (III.) for Bergen, (IV.) for Germany; (V.) shows the divergences in Norway during the months of October, November, and December. On the whole, the rainfall corresponds well with the transverse section of the coast-water some time afterwards. The rainfall was comparatively small in 1902, and the coast-water had a small transverse section in May 1903; the rainfall was large in 1903, and there was much coast-water in May 1904, and so on. The effect of the rainfall on the land is not immediately felt in the coast-current off western Norway;

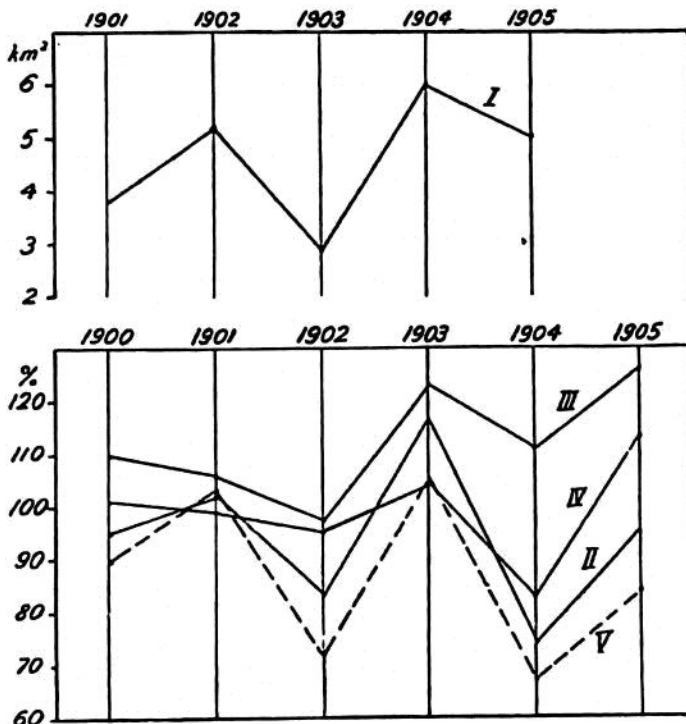


FIG. 166.—CURVES SHOWING THE VARIATIONS IN I. the transverse section of the coast-water off Feje (May); II., III., IV., the annual rainfall for Christiania, Bergen, and Germany respectively; V., the rainfall in Norway during October, November, and December.

there is a delay which seems to make it possible to predict some time beforehand if there is going to be much or little coast-water. This is an example of the predictions likely to be undertaken in the future, when the sea and the air have been more closely studied.

We shall now, after these introductory remarks, examine the vertical distribution of salinity in some different places, as found in the cruise of the "Michael Sars." Fig. 167 represents the physical conditions a little to the north of the Sargasso Sea, at Station 65,

Sargasso Sea region.

on 25th June 1910. In this, as well as in the following figures, the continuous line indicates the salinity, the broken line the temperature, and the dotted line the density.<sup>1</sup> We see that the salinity is greatest at the surface, 36.43 per thousand; this is the result of the strong evaporation. It decreases downwards, at first rapidly, then more slowly, more rapidly again, and finally very slowly; in the deep layers below 1250 metres the salinity is less than 35 per thousand, and throughout the great body of the deep water 34.9 per thousand.

<sup>1</sup> The density is given in abbreviated form, e.g. 25.56 instead of 1.02556, and is indicated by the Greek letter  $\sigma$  ( $\sigma_t$  being the density at the temperature *in situ* disregarding the compression).