

earth. This wave has a very great length, with high-water at the crest and low-water in the trough. Its form remains, fettered by the moon, while the earth revolves beneath it. Passing the opening between Africa and South America, it gives rise to a lateral wave moving from south to north through the Atlantic. This tide-wave reaches the coasts of northern

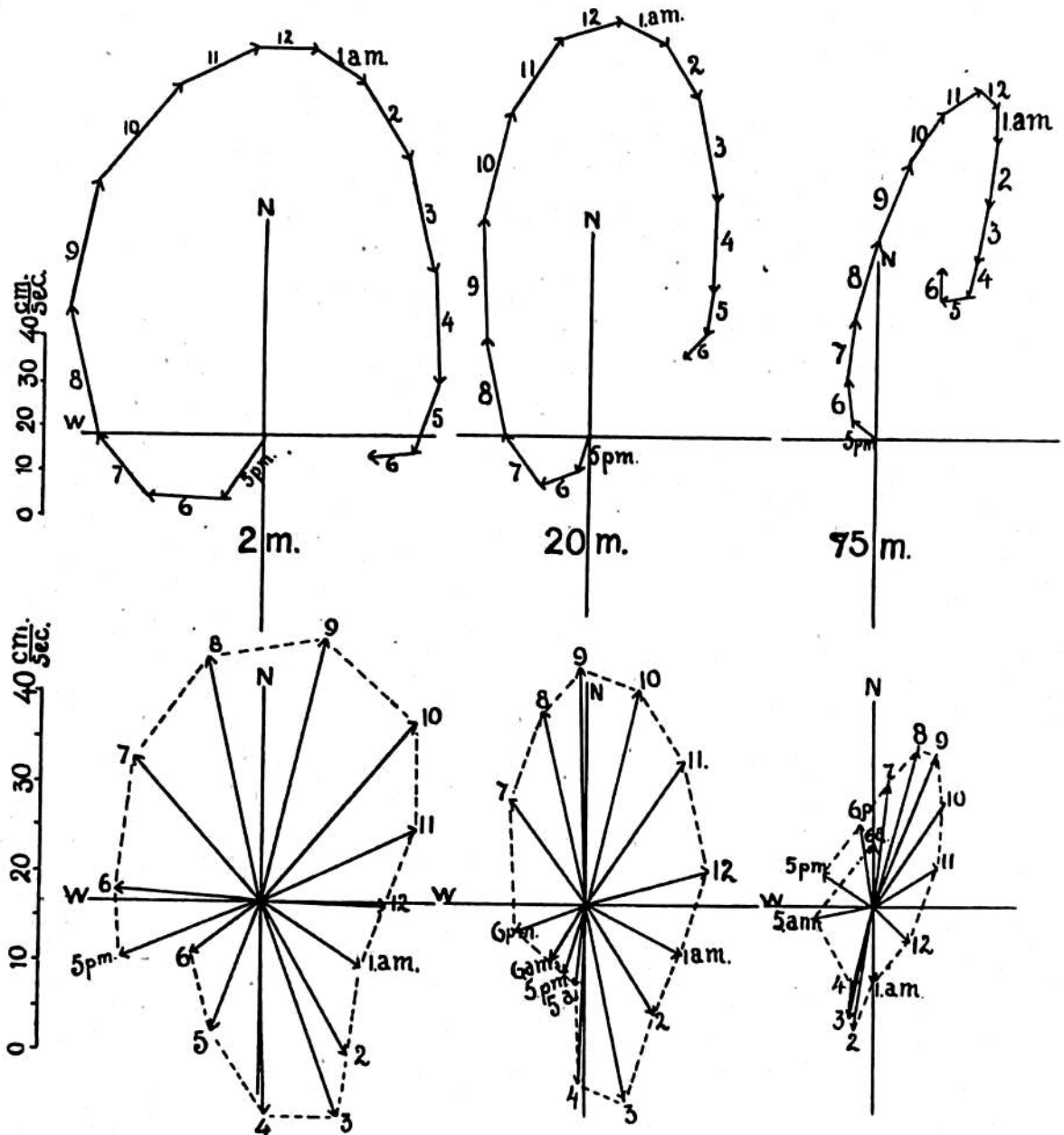


FIG. 179.—THE CURRENTS ON THE LING BANK IN THE NORTH SEA (7th-8th August 1906).

Europe, producing tidal effects there. But besides this wave coming from the Southern Ocean there is formed an Atlantic tide-wave following the movement of the sun and moon from east to west. As already remarked, these things are somewhat enigmatical, but as there is a connection between tidal waves and tidal currents, we may hope that careful current-observations will contribute to the unravelling of these problems.