STATION 226. ORGANISMS FROM SURFACE-NETS. Surface Organisms.—The following are recorded in the note-books from the surface at this Station:—Pyrocystis, Diatoms, Peridinium (Ceratium) tripos and another species (in catena), Oscillatoriaceæ, Globigerina, Orbulina, Hastigerina, Pulvinulina, many varieties of Radiolaria, Medusæ, several varieties of Siphonophoræ, Echinoderm larvæ, Sagitta, Alciopa, tubicolous and other small Annelids, Cypridina (three species), Copilia, Setella, Saphirina, Phronimids, Hyperids, Squilla larvæ, Euphausia, Lucifer, Phyllosoma, Amphion, portion of antenna of a deep-sea shrimp, Halobates, small Lamellibranchs and Gasteropods, Phylliroë, Atlanta, Spongiobranchæa and other Pteropods, Cymbulian larvæ, Doliolum, Salpa, small Pyrosoma (from trawl), small fishes. Many flying fishes (Exococtus) and a shark were seen; a tow-net was carried away by a shark.

About a dozen each of *Pyrocystis noctiluca* and *Pyrocystis fusiformis* were carefully separated from other things and placed in two globes, each globe containing only the same variety, and after dark were examined for phosphorescence. When the water was disturbed several very brilliant spots of light appeared in both globes, and no difference in the nature or intensity of the light could be detected. They lost their light more or less after being disturbed several times in succession, but when allowed to rest for an hour or so they were again as bright as at first.

Station 227 (Sounding 365), Admiralty Islands to Yokohama (see Chart 31 and Diagram 16).

March 27, 1875; lat. 17° 29′ N., long. 141° 21′ E. Temperature of air at noon, 79° 5; mean for the day, 78° 5. Temperature of water:—

Surface, .			15		$79\overset{\circ}{\cdot}2$	180 fat	thoms			60.4
10 fathoms,					79.0	190	"		- 100 - 100	58.8
20	,,				78.8	200	"	·		57.0
30	,,				78.6	300	"			46.2
40	11		35		78.4	400	,,			42.0
50	,,				78.2	500	,,		Ti vi	40.3
60	**				78.0	600	"			39.0
70	,,				77.6	700	',,			38.3
80	"				76.5	800	,,			37.8
90	,,				75 ·0	900	,			37.3
100	,,				73.3	1000	,,	•		36.8
110	,,,	20	34		71.5	1100	,,			36.3
120	,,				70.0	1200	,,			35.9
130	,.			¥	68.3	1300	,,			35.5
140	,,	٠.			66.7	1400	,,			35.2
150	"				65.2	1500	,,			35.2
160	,,				63.5	Bottom,			2	35.2
170	,,		840		62.0					