A Science Service Feature

Released upon receipt
but intended for use
Nov. 20, 1934

? WHY THE WEATHER ? Mailed Nov. 13, 1934

GROUPING OF WAVES

Waves at sea tend to occur in groups, with comparatively calm water between successive groups. Watch the leading wave of a group and you will note that it soon dies out, the one next behind it taking the lead. At the same time new waves rise one after another at the rear of the group, so that the general appearance of the assemblage of waves remains unchanged. The group as a whole advances only about half as fast as the individual waves of which it is composed.

According to unfounded popular belief, every tenth wave -- or some say every ninth -- is exceptionally big. Sir Thomas Browne deals with this fallacy in his "Vulgar Errors," and De Quincy tells in one of his essays how he and John Wilson, on the beach at Porto Bello, counted the incoming billows but failed to verify the tradition of the "fluctus decumanus," or tenth wave.

The grain of truth in this notion is that when two rather regular systems of waves of different periods cross each other at an angle, the physical process of "interference" will result in the formation at more or less regular intervals of a big wave composed of one from each system.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and Constitution Ave.
Washington, D.C.