

pick up the sand may be caused by any number of disturbances such as a fish leaping from the water, or a bird or insect striking the water, or rowing or other human disturbances. The patches are usually but two or three centimeters in diameter, but occasionally may reach as much as twenty cm. The larger patches sometimes are due to union of smaller ones, as has been observed. In a very gentle breeze these patches may go out three or four hundred meters into the lake before they sink. Any disturbance of the patches such as touching them causes all the grains to sink immediately.

At no time at Douglas Lake have any of these patches of floating sand had their origin during a time of high wind. However, in two instances in my experience the sand flotation has been the result of sand being blown onto the water. Each of these two cases has been when a strong wind was forced to blow up over a dune, the face of which was cut into by a body of water. Some of the swiftly moving sand hitting the water at a very acute angle remained in the surface film. In the case at Lake Michigan the amount of sand that remained on the surface was sufficient to interfere with the enjoyment of swimming when one opened his mouth at the surface of the water. While most of the sand went to the bottom very shortly, some of it was still on the lake as much as fifteen meters out from the shore; beyond that, however, the wind could hit the water and disturb it sufficiently to cause no more sand to remain in the surface film. In the second case the sand was blown into the Kansas River. That that hit the river where the current was boiling immediately sank to the bottom. Close to the shore, however, where the water was not obviously disturbed, although moving, a fair quantity of the sand remained in the surface film. The sand that remained in the surface film floated down stream close to the lee bank, which was also on the side opposite from the main current. Although constantly diminished in quantity, nevertheless some small patches were still visible a kilometer down the stream. At this place the wind had full sweep of the river, which disturbance ended the flotation.

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THE NEIGHBORS

IN SCIENCE for November 19 (page 497) it is stated that an Association of Professional Astronomers will meet in New Haven in December. There is no such organization nor any need of one. Some astronomers on the Atlantic coast have, however, been carrying out since 1920 a plan which has proved so useful that possibly other groups (in other locali-

ties or in other sciences) may wish to make the same experiment. Beginning in June, 1920, a number of us whose chief interest is research have been meeting informally about four times a year for the purpose of exchanging ideas and getting the benefit of the collective wisdom and experience of the whole group in the solution of our individual problems. But it is of the essence of this idea that there should be no organization; there is no constitution, no rules of any kind, no officers, no fixed list of members and no dues. We have even lacked a name until very recently, when we have begun to call ourselves the Neighbors. At first we met in New York City, but this was found to be unnecessarily expensive, and for some of the members it was somewhat inconvenient. We now meet at New Haven because it is centrally located and because the courtesies extended to us by two clubs in the city make the meetings much more pleasant than they could be in a busy metropolitan hotel. These meetings begin on Friday afternoon and break up somewhat gradually, most of the out-of-town members leaving on Saturday, a few sometimes remaining over until Sunday. We spend all this time together except the few hours that must be wasted in sleep. It is understood that no one is to attempt to read a paper, but during this day or two there is much astronomy in the air; some of it is very much so, for it has gotten to be a tradition with us that our statements need not be well considered. Many a fascinating theory has seen the light of day, flourished and passed on, all in the space of twenty minutes.

In a small group like this, meeting so frequently, our knowledge of each other has gotten to be intimate and has given rise to a network of friendships which in themselves, aside from any questions of scientific results, justify the existence of the Neighbors.

FRANK SCHLESINGER

NEW HAVEN,

NOVEMBER 29, 1926

FIELD TRIPS IN GEOGRAPHY

TWO recent notes in SCIENCE for June 18 and October 22 have shown the clear appreciation felt among geologists for active field work by their students during the prosecution of their studies. It may be interesting, therefore, to publish here the terms of a travel scholarship recently established in the department of geology and geography at the University of Wisconsin. In this connection, it should be added that the ideal toward which the department is striving is that each student who majors in geography be required to spend fourteen days in the field at least 500 miles away from Madison, during the spring recess of the year in which he takes his degree. The announcement below gives briefly the plan which the student is ex-

pected to follow. Eventually it is hoped that sufficient financial aid will be available so that every capable student who is unable to cover his own expenses will be met half-way with a scholarship of the type described.

The terms of the scholarship are as follows:

1. This scholarship is established to promote a keener appreciation of the importance of intelligent travel in geographical study.
2. It is open to all students, both men and women, undergraduate and graduate, who are majoring in geography.
3. The selection of the scholar will be made at the end of the first semester and will depend upon the quality of work performed during the first semester in all courses, as well as upon his general attitude and personal initiative along geographical lines.
4. The candidates will submit all of their notes, lecture notes, laboratory note books, examination and quiz books, term papers as well as those of lesser importance, and also any other material prepared by them in the prosecution of their studies.
5. The scholarship is for one half the expenses of the trip outlined below, up to \$100, and the scholar agrees to provide a like sum.
6. The winner of the scholarship will register for course Geography 122 for two credits at the beginning of the second semester. The requirements for this course will be met by this trip about to be described, and the subsequent report.
7. The trip.
 - a. The scholar agrees to travel for at least 10, but preferably for 14 days during the Easter holidays to some point at least 500 miles from Madison, as for example to Buffalo, Pittsburgh, New York, Boston, Washington, Savannah, Tampa, Atlanta, New Orleans, Houston, Denver, etc.
 - b. The scholar will endeavor to make an intelligent visit to, rather than a research investigation of, the place visited.
 - c. He will visit and study as far as practicable at least one feature or point of physiographic or geologic interest, and in addition acquaint himself with the regional physiography of the area traversed.
 - d. He will visit at least one extractive industry peculiar to the locality, such as lumbering operations, turpentine production, salt production, some form of agriculture or mining, or quarrying. This will probably demand two or three days in the field.
 - e. He will visit, with some attention to details, at least one manufacturing industry peculiar to the locality, such as smelting, printing, spinning, glass making, locomotive or ship building, or the fabrication of some article of commerce.
 - f. He will visit at least one institution of a public character such as a museum or institution of learning.
 - g. He will familiarize himself with the general plan of one large city, its physiographic setting, the street system, and the arrangement of its different sections, residential, manufacturing, business, transportation and recreational.
8. Upon his return the scholar will prepare a finished report along approved geographical lines, illustrated if possible to fulfill the requirements of Geography 122.

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BREVITY AT BOTANICAL BANQUETS

THIS summer's meeting at Ithaca almost doubled for the year 1926 the opportunities for botanical speech-making in the United States. It may then be not inappropriate or impertinent to discuss the length desirable in such addresses.

Reference is, of course, not here made to papers of a highly specialized character before the various sections of the different societies. These sections are so numerous and so small that no one feels any obligation to attend and each feels perfectly free to leave whenever he chooses. The speaker is then under no obligation to conserve the time of his audience, if any. His position is somewhat like that of an author of a book, who may suit himself or his publisher as to its length, since the weary reader may easily lay the book aside or throw it into the fire.

The obligation for brevity in personal conversation is slight also, for the bored listener can usually escape, either by tact or violence. Whoever addresses an assembly, however, especially one to which people come partly for social reasons and where the auditors feel under compulsion to hear the speaker through, is under a definite obligation to be brief. Not every speaker, of course, can attain the brevity or awaken the enthusiasm aroused by Dr. Britton vicariously in his presidential address at Toronto, but a short speech may be, indeed often is, a good speech.

Brevity in speech, even serious speech, is possible. Lincoln's Gettysburg address contains but 266 words. Paul's speech on Mars Hill contains, in the English translation, exactly the same number. Gamaliel saved the apostles in a speech of 139 words. Franklin, returning to this country in 1783 after his long and distinguished service in Europe, received expressions of congratulation and gratitude from various organizations. His replies to these addresses rarely exceeded 150 words, and one of the most frequently quoted is scarcely one hundred.

Shakespeare appears to have had a very definite conception of what an audience will stand and enjoy.