case would probably say that such an admission is a psychological error, but I am sure that it warms the heart of every scientific man to find a man who has the courage to tell the unvarnished truth, however much he may regret the necessity of it. And we shall have to follow this course and no other in dealing with earthquakes. In this spirit we need the cooperation and support of all men of science, and we feel that we are justly entitled to such support. We also need the support of business men, and we feel that we are equally entitled to it.

Very likely some of you may feel that you do not like to have this or any of these local problems flung at your heads in this brusque fashion. But, my friends, nature has already flung these problems, not only at our heads, but in our very faces. Is it not for us to wake up and be equal to our opportunities? Unless we take hold of the problems of seismology that are so conspicuously our problems here on this coast we shall stand justly discredited in the minds of our colleagues in other parts of the world. The Portuguese have a proverb about people who "fetch water after the house is burned up." Let us see if we can't fetch the water in season.

And while I am using plain language about disagreeable things, I may as well refer to one more unpleasant subject, and have done with it, and that is the necessity of financial backing. Men of science can do the work of science, but they can not foot the bills. For that part of this undertaking we must look to business men. And we look to them with confidence that they will cheerfully do their part. And if we will all pull together and keep up our courage, I feel confident that the day will come when earthquakes will have lost most of their terrors, not only for us on this coast, but for the human race.

Let me end with the words of a California author (Edward Rowland Sill) on opportunity:

OPPORTUNITY

This I beheld, or dreamed it in a dream:
There spread a cloud of dust along a plain;
And underneath the cloud, or in it, raged
A furious battle, and men yelled, and swords
Shocked upon swords and shields. A prince's banner
Wavered, then staggered backward, hemmed by foes.
A craven hung along the battle's edge,
And thought, "Had I a sword of keener steel—
That blue blade that the king's son bears,—but this
Blunt thing—!" he snapt and flung it from his hand,
And lowering crept away and left the field.
Then came the king's son, wounded, sore bestead,
And weaponless, and saw the broken sword,
Hilt-buried in the dry and trodden sand,
And ran and snatched it, and with battle-shout
Lifted afresh he hewed his enemy down,
And saved a great cause that heroic day.

John Casper Branner
Stanford University

## SCIENTIFIC EVENTS

### THE USE OF PRIMITIVE ART IN TEXTILES

In answer to the demand of the American textile industry for designs inspired by the primitive art of this continent, the American Museum of Natural History of New York City on April 16 sent Dr. Herbert J. Spinden, of its department of anthropology, to make special researches in Central American countries. His mission is a development of the policy of the institution to exert a formative influence on modern industry. The European War placed manufacturers of textiles largely on their own resources, as far as designs were concerned. Previously they had been guided largely by the traditions and example of Paris. The museum, recognizing this condition, placed all of its resources and research material at the command of the American looms, and its collections were studied by designers from all parts of the United States. The recent exhibition of figured textiles in the museum conveys an idea of the success which has attended the intro-

duction of the primitive art motif into modern designing.

Dr. Spinden will begin forwarding specimens to New York as soon after his arrival in the field as possible. He will start in Guatemala and extend his investigations to western Honduras, Salvador and Nicaragua. In these localities are small groups of Indians most interesting for their civilization and culture, although comparatively little known. Dr. Spinden will not only obtain examples of designs but will also learn the details of the art of weaving and study the dyestuffs used by the native artisans. The costumes worn by the Indians of Central American countries are not only picturesque, but have many details of construction which might be successfully adapted. The fundamental ideas on which these garments are based are said to be unique.

Dr. Spinden will also get all possible information concerning the native food products with a view to calling attention to their economic value, which is often very great. Specimens of these alimentary substances will be collected for display in the Preparedness Exhibit which the American Museum now has under way. Dr. Spinden will be accompanied by S. G. Morley, of the Carnegie Institution of Washington, who is likewise interested in the archeological features of the expedition. The work is undertaken with the official sanction of all the Central American governments. Most of the traveling will be on mule back through mountainous and sparsely settled regions and over native trails. Dr. Spinden left New York on April 16 and expects to return in about three months.

## RESEARCH WORK OF THE LEANDER McCORMICK OBSERVATORY

THE visiting committee of the Leander McCormick Observatory of the University of Virginia met in Washington on April 17. The director reported that the scientific work accomplished during the year was as follows:

1. The determination of the parallax of fifty stars, results thus having been obtained on one hundred and twenty-five stars since the parallax work was started two and a half years ago. A preliminary value of the parallax of Barnard's star of large proper motion was found to be 0″.47.

2. More than 10,000 observations of meteors were made by amateurs during the year 1916, and were sent in to the McCormick Observatory for discussion and publication. This probably makes the largest number of meteor observations ever collected in any one year, except perhaps during the years of a meteor shower.

3. A plan of cooperation has been entered into with Harvard College Observatory whereby the 26-inch refractor is to be used for the visual observation of variable stars while they are at minima. More than one hundred and fifty stars are on the program, these stars being mainly long period variables.

4. Photographs have been made with an objective grating and with yellow light in order to find the photovisual magnitudes of the Harvard Standard regions.

5. Micrometric measures by C. P. Olivier of two hundred double stars have been published in the *Astronomical Journal.*

Grateful acknowledgment was expressed for financial assistance from the Leander McCormick estate, from the special Adams fellowship from Columbia University for parallax work, from the J. Lawrence Smith fund of the National Academy of Sciences for research on meteors, and for the gift of a wireless apparatus and a computing machine from Mr. John Neilson, of New York.

## THE ENGINEERING COMMITTEE OF THE NATIONAL RESEARCH COUNCIL

THE following engineering committee has been appointed: George F. Swain and Edgar C. Marburg (representing American Society of Civil Engineers), Pope Yeatman and Albert Sauveur (representing American Institute of Mining Engineers), C. D. Young and William F. Durand (representing American Society of Mechanical Engineers), Frank B. Jewett and Clayton H. Sharp (representing American Institute of Electrical Engineers), Lewis B. Stillwell (representing American Institute of Consulting Engineers), John A. Brashear, George K. Burgess, J. J. Carty, Howard E. Coffin, John R. Freeman, Hollis Godfrey,