of expeditions which were sent from the United States with the object of securing data on various astronomical matters. In 1847 Lieut. J. M. Gilliss, founder of the U.S. Naval Observatory, induced Congress to authorize and finance an expedition to South America to improve the value of the solar parallax. Cerro Santa Lucia in Chile was chosen as the site for the observatory, and great progress was made in the next three years, during which the positions of Mars and Venus were determined simultaneously in Chile and in the United States, mostly at Cambridge. Several years later, the reduction of these observations was carried out and a solar parallax of 8·5″ was derived. Research was conducted in other directions, and eventually the Chilean Government became so interested in the work that it arranged for young Chileans to be taught the use of the instruments. Later it purchased these and founded a National Observatory. Dr. Benjamin Gould, who had carried out the reductions for the solar parallax, interested Sarmiento, the Argentine ambassador to the United States, in a scheme for determining accurate star positions in a zone where observations were lacking, and the result was that the Argentine Government founded El Observatorio Nacional de Argentina in 1870, Gould being chosen as director.

Among other projects in South America, reference is made to another Argentine observatory, built at San Luis, through the influence of Prof. Lewis Boss, director of the Dudley Observatory in Albany, New York. This Observatory obtained a total of 85,000 star positions between 1909 and 1911. Before this, so early as 1890, Prof. S. I. Bailey established a station for the Harvard College Observatory in Arequipa, Peru; this was transferred to South Africa in 1926. In 1903 Prof. W. H. Wright established a station on Cerro San Christobal on the outskirts of Santiago for determining radial velocities. This station was known as the D. O. Mills Expedition of the Lick Observatory, and when the work was completed, the equipment was sold for a nominal price to the Catholic University of Chile. These and other astronomical ventures have established creditable cultural relations and lasting good-will between races with differences in customs, aspirations, and mode of thought, and have led to a better understanding of both scientific and political problems.

Origin of Meteorites

H. H. MININGER, Colorado Museum of Natural History, in a paper entitled "Trends in Meteoritics" (*Sky and Telescope*, **1**, 8; June, 1942), gives a short résumé of our knowledge of meteorites. Most hypotheses in the past regarding the origin of these bodies gave more attention to iron than to stone meteorites, and erroneous conclusions were drawn. Chondrules, the most abundant of all meteoric constituents, have almost certainly been formed by repeated collisions between crystals and other solid bodies. For this reason, a situation which would provide for the rounding of crystals into chondrules would also produce the fragmentary matrix in which chondrules are usually embedded. It is suggested that in the past, when the sun was more active, extruded gases crystallized and collected into cometary swarms and within these swarms chondrules were produced by repeated collisions, while the aggregation of the resulting fragments and chondrules gave rise to meteorites. Some of the cometary swarms passed close enough to the sun to allow for the fusing of a percentage of the constituent grains, and this process was carried almost to the point of completely fusing the mass in the Lubbock aerolite, which was described in the *American Mineralogist* (**25**, 528–33; 1940).

It is surprising to learn that a considerable proportion of stony material which enters our atmosphere is reduced to dust. Dr. Lincoln La Paz has estimated that the Pasamonte meteorite weighed 66,000 tons at least when it entered the atmosphere, but only 4,000 gm. were collected. A huge dust cloud occupying about 1,000 cubic miles accounted for the principal mass of this meteoritè. Further research on meteors may well yield useful information on the past history of the solar system.

The Beet Leafhopper

THIS insect, known scientifically as *Eutettix tenella*, forms the subject of Farmer's Bulletin No. 1886 (1941) of the U.S. Department of Agriculture, by W. C. Cook. We note in this publication a markedly enlarged dimension of its pages as compared with the usual run of its predecessors. Its value is thus enhanced by allowing of larger scale and more detailed illustrations and of a more convenient spacing of the letterpress. The beet leafhopper is native to the western United States and to northern Mexico, and is notorious as the carrier and transmitter of the virus of the destructive curly top disease of sugar beet and also of western yellow blight of tomatoes. During many years past the curly top disease has been a major factor limiting the production of sugar beet in many western areas. The whole problem of its control is a difficult one since direct spraying is rarely of value. In many areas the control of grazing is the most feasible method of attacking many of the plant hosts of this insect. In some cases reduction or elimination of the Russian-thistle, the most important summer host, by mechanical means is possible. The actual status of the natural enemies of the leafhopper is difficult to assess, but they are considered to be of great importance. The most notable are flies of the family Pipunculidæ and parasitic wasps of the Dryinidæ group. Predacious bugs, one of which is *Geocoris pallens*, are said to be of equal importance as parasites in reducing its numbers. The development and successful production of strains of beet resistant to the curly top disease has greatly reduced the losses incurred by the spread of the virus disease. By this means the cultivation of sugar beet has been made possible in districts formerly found to be unsuitable.

Earthquakes Registered in Switzerland

ACCORDING to bulletins just received concerning earthquakes registered at the observatories of Zurich, Basle, Neuchâtel and Chur, fifteen earthquakes were consistently registered during February 1942 and nine strong earthquakes during March. Many of these have been mentioned previously in the columns of NATURE, but epicentres on the European continent can now be given. On February 6 an earthquake recorded at Zurich at 00h. 10m. 46·6s. had its epicentre in the Rheintalgraben to the south of Freiburg. On February 7 an earthquake recorded at Zurich at 03h. 55m. 41·4s. had its epicentre near Venice. This was strongly recorded at all the stations. On February 12 an earthquake registered at Zurich at 16h. 03m. 17·5s. had its