

to curl inward towards the golden heart. The yellow-green of the under-section of the petals now began to reappear as they folded together. Soon the golden mushroom-like center became hidden by the enfolding petals, then disappeared in the ball of white with its pale yellow under-side. The flower seemed to shrivel and shortly after the sinking sun threw the last glorious tinge on the summer twilight sky, the white globe which had been the lovely flower of the famous *Gordonia* dropped off the stem, leaving only a pale green scar in the heart of leaves, a scar scarcely seen, but eloquent relic of one of nature's dramas.

EDWARD S. SHORTER

ANTI-EVOLUTION IN NEW ENGLAND

THE following letter coming from Hartford, Connecticut, and signed by a well-known New England name may be of interest to readers of SCIENCE:

You may discontinue my subscription to Ecology.

Ecology now has articles from the standpoint of evolution; for instance *Further Views on the Succession-Concept*, H. A. Gleason, July, 1927. It is with regret that I do this. I have found a great deal about ecology in it. I have taken it ever since the beginning as I was one of the subscribers to the *Plant World*. I have no use for evolution and do not see how any intelligent person can have.

BARRINGTON MOORE

AN ANTI-VIVISECTION SCREED

THIS anonymous note reached me a few days ago following a very simple operation that I had. I thought possibly the readers of SCIENCE would be very much amused at this ebullition of temper. I take it that it is from a woman, and if so I pity her possible husband.

Why didn't you have the operation without anesthetic, so you could see how the animals feel, that you have tortured all these years? You will have an awful body in the next incarnation!

That notorious old French vivisector at the age of eighty in Paris, has acknowledged that no good has come of it, and that he knows it is not good for the students' minds. You could do much good before you die, by expressing your self in like manner. You have one foot in the grave now, and the other on a banana peel, you old fiend.

The fun of the thing is that I have *never* been a research worker. The first laboratory of Medical Research was established in connection with Bellevue Hospital Medical School by Andrew Carnegie in 1884. By that time, my career was marked out for me very clearly as that of a clinical surgeon. I have never experimented on *any* animal, not even a mouse or a frog.

I shall keep my eye on that banana peel you may be sure.

W. W. KEEN

SPECIAL CORRESPONDENCE

THE STUDY OF GEOLOGY BY AEROPLANE

ON January 12, 1929, my class in "Sedimentation" at the University of Southern California took an aeroplane trip along and over the Whittier Hills and Santa Ana Mountains, east and southeast of Los Angeles, California. The plane, a four-passenger type, was supplied through the kindness of the Stooddy Company. It is believed that this was perhaps the first use in the United States of an aeroplane by an entire geology class. Since each student was aloft an hour and a half, it has seemed worth while to record their impressions and to ask for suggestions from other schools that may be planning flights, or may perhaps have antedated this one.

The students had already spent a semester in studying the peneplained Triassic basement complex of quartzites and slates, shot with Jurassic intrusives and partly overlain by Jurassic (?) extrusives; as well as the Cretaceous and Eocene formations, chiefly heavy sandstones where exposed in the Santa Ana region. All the formations are tilted into an unsymmetrical anticline with its gentler dip to the southwest and complicated by a dome-like anticline striking north-south on the western flank of the major structure.

We were uncertain as to how much could be observed from the air during the time each student was allotted. Accordingly, directions were given to center attention on four points:

(1) A fault which runs along the entire southern front of the Whittier Hills.

(2) Terraces, due to the latest uplift, along the canyons of the Santa Ana Mountains.

(3) The contacts between Triassic and Cretaceous, Lower? Cretaceous and Upper Cretaceous, Upper Cretaceous and Martinez Eocene, Martinez and Domingine? Eocene.

(4) The great Perris peneplain to the northeast of the Santa Ana Mountains. This plain had never seemed to the students a base-leveled region, because, observed from the earth, the flatness is obscured by elevations, numerous, highly irregular in shape, and often five hundred feet high.

I accompanied each group of three. After the first gazing at the ground was over—some of the students had never been aloft—the three began to take notes. Note-taking, as well as use of topographic maps, proved easy for the better students. I made occasional suggestions, but most of the time confined myself to observing the elevation and the effects of