for the luminosity of the cloud. It could not have been due to reflected light coming from a city. It might be postulated that the cloud consisted of a mass of organic vapor that was slowly oxidizing, being in fact a case of an extended will-o'-the-wisp, but for several reasons this seems to be an unlikely hypothesis. At the time the cloud was observed, it was thought to be far too late in the evening for its light to be reflected sunlight. There is a possibility that a bright moon below the horizon might have been the source of the light, although I have no recollection of having seen the moon rise later.

SLOANE PHYSICS LABORATORY, YALE UNIVERSITY

### ENTOPTIC COLORS

I was extremely interested in reading the description of the phenomenon reported by Mr. Paul E. Klopsteg, which he observed in his neon tube experiments. I have observed for some considerable time what I believe to be the same thing, only obtaining it in a different manner. I am an amateur movie enthusiast, and from time to time in setting up my projector I have had occasion to run it without any film, with the light shining against a white screen and at varying speeds. I have noticed that at a certain speed which is somewhat less than the standard speed of 16 per second there is a very decided color phenomenon present. This effect is very difficult to describe, as it appears to be a mixture of flashes of the various colors mentioned by Mr. Klopsteg. I should say also that the frequency would probably be about 10 or 12 per second.

The first time the phenomenon was observed I was undecided as to whether there was a defect in my visual apparatus, but inasmuch as it can be produced at will I came to the conclusion that it was perfectly normal. If, as Mr. Klopsteg suggests, this phenomenon offers an opportunity for some original

## THE TEXAS ACADEMY OF SCIENCE

THE Texas Academy of Science held its annual meeting on November 27 and 28 at San Antonio, where it was the guest of the city and had its meetings in the Witte Memorial Museum through the kindness of Director Ellen S. Quillen. An extensive and varied program was given, which was divided into papers of like interest rather than into those representing any one of the sections of the academy. The section of the geology and its closely related sciences heard among other papers presented one on the "Silting of Lake Worth," by Dean T. U. Taylor, dean of engi-

JOHN ZELENY

work, the thought is suggested to serve that my observation might prove of value, inasmuch as a different method of production is used. The illumination used is the regular incandescent lamp which gives a somewhat whiter light than the ordinary incandescent bulb and has a concentrated filament, but otherwise is quite standard. ELMER F. WAY

INDUSTRIAL LABORATORIES, GRAND RAPIDS, MICHIGAN

## THE PREVENTION OF CONVULSIONS

IN connection with an item under Science News entitled "Sunshine and Cod Liver Oil for the Prevention of Convulsions," which appeared in SCIENCE, March 20, 1931, I wish to draw attention to the fact that in a series of experiments conducted at University College Farm, Dublin, on calcium metabolism in the pig, convulsions appeared in a group confined on a non-vitamin D diet, to a compartment lighted through window glass. Similar groups getting vitamin D did not develop convulsions. The experiments are described in a paper published in the Journal of the Department of Agriculture, Dublin, Vol. 30, No. 1, from which the following abstract giving a description of a convulsive fit in the pig is taken:

A pig suddenly developed a tremor which rapidly intensified, the animal arching its back and progressing backwards until impeded by some obstacle. In some cases the pig squealed as if suffering from intense pain and after a lapse of three to five minutes it fell prostrate to recover gradually in from seven to ten minutes after the onset of the attack.

The group of pigs which developed convulsions exhibited all the symptoms of an intensified form of rickets.

E. J. SHEEHY

ALBERT AGRICULTURAL COLLEGE, DUBLIN, IRELAND

# SOCIETIES AND MEETINGS

neering, University of Texas. Dr. E. H. Sellards, of the Bureau of Economic Geology, University of Texas, gave an account of the Texas earthquake, August 16, 1931. This is the first paper in which this earthquake, which was felt over much of Texas and adjacent states, has been reviewed. William Cunningham, of the department of chemical engineering, University of Texas, gave a full account of the sulphur industry of the Texas coast. This paper was perhaps the most enjoyed of any technical paper given at this meeting. From the standpoint of research into unknown fields the paper by Frederick A. Burt, of the Agricultural