cilors were appointed, including Dr. T. Kitajima, head of the Japan Medical Association. The society will begin work this autumn; its selection is said to be the result of careful deliberation by 110 councilors.

DISCUSSION

OBSERVATION OF A NEW MEXICO METEOR FROM THE AIR

A METEOR of unusual size and brilliancy passed over a portion of the Texas Panhandle and eastern New Mexico on the morning of March 24, 1933. This meteor was described in *Science News Letter* for April 8, by Dr. John Strong, of the California Institute of Technology, who observed it from a train between Springer and Wagon Mound, New Mexico.

A rare opportunity for observing this meteor was had by C. W. Coyle, a T. and W. A. air pilot flying from Albuquerque, New Mexico, to Amarillo, Texas. Mr. Coyle was in the neighborhood of Adrian, Texas. When first seen by him the meteor was very low; it seemed to be rising in the east and appeared like a floodlight gradually being turned on. Then it seemed to be coming directly toward him, rapidly increasing in brilliancy and leaving a long trail behind.

The meteor passed to the north of his line of flight, and as it passed him, fragments were discharged from the meteor. It seemed to disappear in the longitude of Tucumcari, New Mexico, perhaps in the vicinity of Mosquero. In passing, the meteor seemed to be lower than the airplane, which was flying at an elevation of about 7,000 feet. The direction of the trajectory was judged to be about 70 degrees west of south.

The time of the meteor's flight was about 5:07 A. M. (M. S. T.), and its duration was about 5 seconds. The illumination caused by the meteor is described as "three times as light as day." (The hour was a little before sunrise.) The front of the meteor was a reddish color and behind it was a cone of blue. The "tail" was a bluish, incandescent cloud, which continued visible, through several changes of color and form, until dawn, or till 5:35 A. M. This cloud of meteoric dust was visible at Amarillo through a low fog or haze, and was at an elevation of about 50 degrees with the horizon.

The passing of the meteor created an electrical effect, which appeared in the radio set of the pilot, resembling frictional static sometimes caused by dust in the air. This effect lasted for a little while after the meteor had passed.

Sounds were reported, as coming from the meteor, at Clayton and Estancia, New Mexico, and Texline, Texas.

The meteor was noticed by an air pilot, Mr. Frank Williams, who was flying west near the Zuni Mountains, about 300 miles west of the other air pilot. He saw the light of the meteor and the cloud which hung in the sky, but the meteor did not pass him. He noticed that the bright light ended suddenly.

An observer at Amarillo, Texas, saw the meteor first at an elevation of about 50 degrees and almost directly northeast of him. He observed it for some seconds, as it seemed to come directly toward him, growing brighter rather than seeming to move. He noticed that the light was bluish at first, but in passing was like the sun. He saw the cloud for 30 minutes, but there was no cloud caused by the explosion. He saw the meteor "explode," he thought near Clayton, New Mexico. He noticed that most of the fragments seemed to "shoot up" and then disappear; only a few, and larger, pieces fell down and backwards.

An Associated Press notice of May 8 stated that a man living near Vanadium, New Mexico, exhibited at Silver City a 400-pound meteor which he had dug up on his ranch at a depth of 18 feet. He reported having been awakened on the morning of March 24 by a loud explosion and quaking of the earth. If this was a piece of the same meteor that was seen in the northeastern part of the state, its position would indidicate that it had been shot out at the time of the explosion of the meteor, following a somewhat different direction from that of the original meteor.

One of the most remarkable records of the meteor is a photograph of the cloud of meteoric dust, that was taken by an Albuquerque photographer about 20 minutes after the passage of the meteor. This shows a very luminous area beyond dark clouds overhanging the Sandia Mountains 15 miles to the northeast. The sky shows just a little illumination at the right of the picture, due to the approaching dawn.

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AN EXPLANATION OF THE CAUSE OF SPIRAL GRAIN IN TREES

SPIRAL grain in so-called twisted trees has engaged the attention of several observers from widely separated parts of the country. Seifriz[1] has reviewed the literature relative to spiral grain and presents an interpretation of the cause.

Eames and McDaniels[2] state (p. 145) that "spiral grain also is related to the structure of the cambium." Division of the cambium by a peculiar kind of cell-plate formation has been decsribed by Bailey.[3] Spiral

[1] William Seifriz, SCIENCE (n.s.), 77: 50–51, 1933.

[2] A. J. Eames, L. J. McDaniels, "Introduction to Plant Anatomy," McGraw-Hill. 1925.

[3] I. W. Bailey, *Amer. Jour. Bot.*, 7: 417–434, 1920.