sult in the formation of irregular chimneys of sand in such clays. This hypothesis appears to require so exceptional conditions as to be almost irreconcilable with the wide distribution of the mounds. J. A. UDDEN.

AUGUSTANA COLLEGE, ROCK ISLAND, ILL., May 15, 1906.

SPECIAL ARTICLES.

RECENT EARTHQUAKES RECORDED AT ALBANY, N. Y.

UNDER the direction of Dr. John M. Clarke, state geologist, a seismograph has been installed at Albany, N. Y., and was placed in operation early in March, this year. The instrument belongs to the Bosch-Omori horizontal-pendulum type. It is mounted on a concrete pier in the basement of Geological Hall. Special care has been taken to isolate the pier, so far as practicable, and to protect the instrument from artificial disturbances. There are two pendulums which record the north-south and east-west components of mo-The elevation above sea level has not tion. been determined, but it is somewhat less than 100 `feet.

Up to April 22, three seismic disturbances had been recorded, one on April 10 and two on April 18, the date of the destructive earthquake at San Francisco.

Fost-West North-South

1. April 10, р.м.¹

	East-west	North-South
	Comp.	Comp.
	h.m. s.	h.m. s.
Beginning,	$4\ 29\ 15$	4 29
Beginning principal part,	4 41	4 41
End principal part,	4 46	$4 \ 42 \ 30$
End,	5 27	458
Maximum amplitude,	35 mm.	25 mm.
Period of maximum waves,	24	17
2. April 18, а.м.		
Beginning,	8 21 30	8 21 30
Beginning principal part,	8 32 30	8 33
End principal part,	8 42	8 42
End,	$11 \ 05$	9 37
Maximum amplitude,	48 mm.	65 mm.
Period of maximum waves,	20	18
3. April 18, р.м.		
Beginning,	$7 \ 48 \ 30$	7 48
End,	8	7 57
Maximum amplitude,	0.1 mm.	
¹ Eastern standard time.		

The multiplying ratio of the pointers was twelve on April 10 and ten on April 18. The period of both pendulums was about 30 s. The instrument has been in good working order since its installation, though on April 10 the east-west pointer (registering north-south component) showed an abnormal displacement due probably to its being in slightly unstable equi-The displacement was coincident in librium. time with the arrival of the larger waves. Again on April .18 (A.M.) the record made by the same pendulum showed a greater amplitude for the maximum wave than that registered by the north-south pendulum, but this was apparently due to the seismic disturbance itself, as the preceding and subsequent waves on the former record were much smaller.

It is interesting to note that the duration of the preliminary tremors was about the same in the earthquake of April 10 and in the larger one of April 18, which, if the former came from the west, as seems probable, would indicate that the two had a common origin.

· DAVID H. NEWLAND.

GEOLOGICAL HALL, ALBANY, N. Y.

PARAPHYSES IN THE GENUS GLOMERELLA.

ATKINSON was probably the first investigator to obtain a perfect or ascigerous stage from a species of Glæosporium. Stoneman, one of his students, continued this line of investigation, and, as a result of her studies, described a new genus which she called Gnomoniopsis. containing five species, one of which was considered doubtful. She did not happen to obtain the ascigerous stage from what was then known as Glæosporium fructigenum (Glomerella rufomaculans), although she grew it in cultures, but Clinton did about four years afterward, and several other investigators have since, among them being Spaulding and von Schrenk, who changed the name of Stoneman's genus from Gnomoniopsis to Glomerella.

With the exception of Stoneman's doubtful species, there is no evidence that any of these investigators saw anything suggesting paraphyses. On the contrary, Clinton says in his bulletin on the rots of apples, 'There was no