

somewhere a statement in print to the effect that the Park is remarkably poor in insect life. It would appear from Mr. Hubbard's letter that this notion had to be considerably modified, at least so far as the Coleoptera are concerned.

The Secretary then read the following paper :—

INSECT LIFE IN THE HOT SPRINGS OF THE YELLOWSTONE NATIONAL PARK.

BY H. G. HUBBARD.

Pleasant Valley Hotel, August 7, 1891.

"The arrangements we had to make with the proprietors of the stage line gave us a trip of five days from Beaver Canon to the mammoth Hot Springs for \$35 apiece, there being three of us. But if we stopped over anywhere it was \$10 extra; it was also \$10 extra to make the trip to Yellowstone Lake. But I am very glad we did not omit this, as it is by far the most delightful part of the Park. As the distances in the Park are tremendous, you can imagine I had not much time for collecting, and most of the insects I did get were taken when I could get out and walk while the carriage was going up some long hill. However, we had an entire day at the middle and upper geyser basins, as we had to travel only eight miles. There were hundreds of pools and geysers to visit which would have more than occupied the entire day if I had not skipped most of them. I, however, saw three of the large geysers play, and that was quite sufficient. These geysers and hot springs always build up either a hill, or if there are many of them together, they form, perhaps, immense terraces, covered with pools full of boiling water, and generally running over in thin streams. Millions of insects fall into these transparent pools, or get suffocated by the steam, and their dead bodies are floated to the edge of the basin, and there, in a few hours, they are coated with lime. Around all the pools and geysers and everywhere in the Park, where hot sulphurous water is running over the ground and forming tepid or hot pools, there is to be found *Cicindela hamorrhagica*. At the mammoth hot springs on the terraces, where the hot water forms shallow basins, I saw this *Cicindela* running along the edge of the flutings, where the water, quite warm, was pouring over the rim. They did not hesitate to run in the water where it was one-eighth of an inch deep. I thought they must be there for some predatory purpose, so I examined these basins carefully, and, sure enough, there were thousands of minute gnats