- 1. Activity is induced at temperatures of from 70° to 80° F. through the application of either vapor heat or hot water.
 - 2. Temperatures of 60° and 90° F. have little effect on activity.
 - 3. Temperatures below 60° or above 100° F. induce inactivity.
- 4. Reviving the quiescent state of Anguillulina dipsaci depends considerably upon the type of infestation and the condition of the host bulb.

The identity and origin of the sucking lice of American monkeys. HENRY E. EWING.

The identity of the sucking lice found on American monkeys has been a subject of controversy, some workers holding that they are the same as those occurring on man and others that they are different. A few years ago the opinion was expressed by the writer that all of the lice taken from American monkeys were distinct from any form occurring on man. When this opinion was given it was easily demonstrated that all of the forms represented in our National Museum collection were very distinct in certain characters from the varieties of Pediculus occurring on man. So distinct were they in fact, that a new subgenus, Parapediculus, was erected for their reception. However, since then material has been received of a different sort. On August 29, 1930, a monkey, Pithecia monachus, from the Upper Amazon, died at the National Zoological Park. This individual was heavily infested with various stages of a Pediculus species. A few days later, September 10, 1930, a second monkey, Cacajao rubicundus, from the Upper Amazon, died at the National Zoological Park. It also was heavily infested with the same species of Pediculus, and I collected many specimens representing various stages of development.

A careful study of the specimens obtained from these two monkeys indicates that they represent Pediculus humanus americanus Ewing. Particularly convincing in this respect is the direct comparison of the tritonymph of the monkey-infesting species with a tritonymph from the scalp of a pre-Columbian American Indian mummy. Admitting for the sake of argument that these monkey-infesting lice are the same as those on American Indians, two questions arise. Did these individual monkeys get their lice from infested humans, or was this louse species acquired many generations ago by some common ancestor of the two monkey species? To me it appears that these lice very probably were acquired directly by one of these two monkeys from some human and then spread to the other monkey. And if living American monkeys can be successfully parasitized by a human variety of Pediculus humanus, we have here an indication that other forms of Pediculus found on some of these monkeys may be only the descendants from lice that were acquired many generations ago by monkeys from the first American Indians to reach tropical America.

Haemaphysalis cinnabarina Koch, 1844, from the sharp-tailed grouse. ALLEN McIntosh.

Ticks collected by Dr. G. W. Cronen from the sharp-tailed grouse, *Pedioecetes phasianellus* (Linnaeus), south of Eagle Butte, South Dakota, have been identified as *Haemaphysalis cinnabarina* (= *H. chordeilis*). This is a new host record and a new locality record for this tick. Dr. Cronen stated in correspondence that 8 birds taken September 23, 1933, had several engorged ticks attached to the head and a large number of small ticks crawling among the feathers. Four additional birds of this species taken September 25, 1933, were also infested with the same species of tick.

Ticks from Australia. ALLEN McIntosh.

A collection of Australian parasites recently donated to the U. S. National Museum, a part of the collection of the late Doctor N. A. Cobb, contained sev-