micra in diameter. In a Purkinje fiber of the moderator band a cyst occurs which measures 170 micra. There are cysts in the fibers of the bundle of His ranging in diameter from 60 to 234 micra.

In the second case the cysts are found in the pectoralis major muscle of the turkey-buzzard. Fibers of this muscle measure 56 micra in diameter. Sections of three cysts measure, respectively, 52, 57 and 65 micra. Sections of the buzzard's heart were prepared and studied, but no cysts were found.

The spores within the cysts of the beef-heart measure 3 to 4 micra in diameter and 16 to 18 micra in length. Those in the buzzard measure 2 by 9 micra. In both the beef-heart and the buzzard-muscle the fibers adjacent to those containing cysts appear perfectly normal. Neither is there any connective-tissue-reaction to the presence of the cysts.

Although these parasites have been repeatedly described in the hearts of various species,[2] we have not found specific mention of their occurrence in the Purkinje fibers. Wenyon tabulates thirty-five species of Sarcocystis with four additional cases in which the species were not named. We have found no mention of these parasites occurring in the turkey-buzzard, either in the general literature or in Wenyon's book, although he lists nine other species of birds in which they have been found. The finding of these parasites in the buzzard is interesting in view of Crawley's statement[3] that "whereas the purely herbivorous cattle are practically invariably infected, records of the finding of sarcosporidian cysts in the muscles of carnivorous animals are very rare."

Alexeieff,[4] who studied these forms extensively, concluded that there is no means of telling what the species may be, and that, in spite of variations in size, all belong to the same species. Hence, we merely record that we found Sarcocystis sp. as described above in the Purkinje fibers of the beef-heart and in the skeletal muscle of the turkey-buzzard (*Carthartes aura septentrionalis*).

H. L. OSTERUD,
K. F. BASCOM

MEDICAL COLLEGE OF VIRGINIA,
RICHMOND, VA.

[2] Manifold, J. A., 1924–25, "A Case of Human Sarcosporidiosis." Trans. Roy. Soc. Trop. Med. & Hyg., London, xviii.

Hadwen, S., 1922, "Cyst-forming Protozoa in Reindeer and Caribou and a Sarcosporidian Parasite of the Seal (Phoca richardi)." *J. Am. Vet. M. Assn.*, Vol. lxi.

[3] Crawley, H., 1916, "The Zoological Position of the Sarcosporidia," Proc. Acad. Nat. Sc., Phila., Vol. lxviii.

[4] Alexeieff, A., 1913, "Recherches sur les Sarcospiridies." Arch. de Zool. exp. et gen., li, pp. 521–569.

QUAILS, POTATO-BUGS AND OTHER THINGS

HERE in Beaufort, S. C., there are many potato-bugs and quails. It may not be generally known that quails eat potato-bugs. Even ducks and guineas refuse to eat them. The potato-bug seems to have very few enemies.

Quails here. eat acorns—scrub-oak and live-oak acorns. The agricultural department at Washington told me some time ago that they did not know of a live-oak strain carrying sweet acorns. There are three of these trees in Allen Park, Augusta, Ga., and I know one here on the Harvey place. The acorn is as sweet as the meat of a chinquapin, and by the way these chinquapin trees grow here thirty feet high and have bushels of chinquapins on them.

Another interesting tree which grows wild here is the Chinese tallow. Chickens fly up into the tree to eat these quite edible seeds. When the pods have burst and an oily seed is placed on a live coal it sends up a white flame six or eight inches high which burns steadily for three or four minutes.

In the up-country the *Magnolia grandiflora* is an ornamental lawn-tree. Down here it is a regular forest-tree only, with diameter of three or four feet and grows along with slash pine and live-oak in the forest.

N. L. WILLET

BEAUFORT, S. C.

THE EARLIEST DYNAMO

I NOTE in your issue of April 13 a notice of the approaching fiftieth anniversary of the invention of the dynamo. I desire to call your attention to the fact that in the Centennial Exposition of 1876 there were two dynamos on exhibition known as the Gramme Dynamo. These machines were made in Paris. At the close of the exposition, Professor Barker, of the University of Pennsylvania, bought the larger of these machines and I bought the smaller one for the young institution of learning, Purdue University. Following the close of the exposition my Gramme machine was sent to Lafayette and installed in the chemical laboratory. I also built a lamp which was very successful, mounted it in the cupola of the university and illuminated the city of Lafayette late in November with the first electric light ever shown west of the Alleghenies and generated by a dynamo. This machine remained in use in the physical and chemical laboratory of Purdue University up to a recent date, and is still in an excellent condition. It has now been installed in the museum of Purdue, properly labeled with the data