writer's attention was called by Merriam to a very interesting paper by E. H. Barbour and C. B. Schultz[2] in which they describe a new genus and species, *Proantilocapra platycornea,* Barbour and Schultz, from the Lower Pliocene in Cherry County, Nebraska. However, no comparison or reference to the closely related genus *Sphenophalos nevadanus* Merriam was made. *Proantilocapra,* as figured, shows morphologic characters close to those of *Sphenophalos.*

The horn-cores as to size, attitude in relation to orbit and frontal and in cross-section are much like those of *Sphenophalos.* The latter differ in being bifurcate, a character common to *Sphenophalos* from the Great Basin Province.

The occurrence of the new genus *Proantilocapra* in the Lower Pliocene of Nebraska adds important data in solving this problem.

In the original description and occurrence of *Sphenophalos,* Merriam discussed the systematic position of the genus and recognized, in the then available material, characters that indicate a close relationship to the pronghorn antelopes.

Specimens of the same species collected later in other Great Basin localities of middle and earlier Pliocene studied by Furlong[3] confirmed this view.

A more detailed report on the new genus *Proantilocapra* by Barbour and Schultz and other representatives of the same species will be welcome.

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CONCERNING REASONING

THE twenty-four canaries fly freely in the laboratory. One of them, Billie Burke, alit on the top of the window shade, slipped, slid down between the window and the shade, came out at the bottom, parachuted to the concrete floor. That accident the canaries have many times each day, but Billie was unlucky, caught her wing and broke it. There have been three injured wings in the seven years, but this wing healed badly and the bird will never fly.

While she was convalescing I put her water and food near her on the floor. The others have their food on the top of the zinc-top table. She disliked eating down there alone, and the first realization I had of the bad healing was seeing her pathetically inadequate efforts to spring to the top of the table. This spring was with her legs. She did not use her wings at all. The spring carried her in the beginning to a height of three or four inches, later to a height of seven or eight.

Presently it occurred to me to build her a spiral staircase of sticks around the one table leg, the sticks two inches apart. This I did at night. All the next day she paid no attention to the sticks. The other canaries paid no attention either, at least did not regard the staircase as a way to the top of the table, though they might perch on a stick or hop up two or three. So the second morning I decided to put out Billie's water but not her food. I watched all day for something to happen. Nothing did. Toward evening I tied leaves of lettuce to the ends of the sticks. Still nothing happened. The other canaries ate on the top of the table where they were used to eating, and Billie stayed on the floor and did not eat. Nevertheless, the third morning when I arrived at the laboratory she was on the top of the table, and from then on has lived most of her life on the top of the table.

But in a week or two I began to realize that even this was not satisfactory. Birds like to sleep high, and nights when they were all getting ready you could see Billie cock her head to watch the others. Therefore, what I did now was find a small tree, stripped it of all but a few of its upper branches, mounted the tree on the end of the table, tacked a staircase of sticks around the trunk, and in thirty seconds she was perched at the top! I had no experimental intention, of course. I was only wanting to get her up there, and there she was. It had taken her two days to see how to get to the top of the table, and thirty seconds to see how to get to the top of the tree. Yet the ladder round the tree in general appearance was certainly sufficiently different from the ladder round the leg of the table. How she originally got to the top of the table I do not know. It may have been by a succession of blunders, or it may have been blunder plus recognition, as is the more likely, considering that there were nine steps. But assuredly it would seem that she recognized the essential characteristic of her first experience, and used it instantly to a new end.

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SPECIAL ARTICLES

GRAVEL CUSPS ON THE CALIFORNIA COAST RELATED TO TIDES

WHILE living in Santa Monica during the winter of 1933–34, the writer became interested in the triangular masses of gravel and cobbles, called "cusps," which were found on the beach at the mouth of Santa Monica Canyon. It was observable that these cusps were subjected to great variation in size and number.

[2] E. H. Barbour and C. B. Schultz, *Amer. Mus. Nov.,* No. 734, pp. 1–4, August 3, 1934.

[3] E. L. Furlong, *Carnegie Inst. Wash. Publ.* 418, pp. 27–36, 1931.