

682, 1 plate with 29 figs., 1893 and 8: 257-360, 1 plate with 24 figs., 1895). In these two papers thirty-two forms from Hill City and vicinity are listed, and ten of them are described as new. It was Pergande's habit to divide his series and to retain some specimens of each form for his own collection when he sent material to a specialist. If the ants proved to be new, he labeled his specimens as types, although they were not really types since the authors of the names had not seen them. Such specimens from the Pergande collection can now be found in the Museum of Comparative Zoology, Cambridge, Mass., the National Museum, Washington, D. C., and the American Museum of Natural History, New York City.

Titus Ulke, now in his eighties and living in Washington, D. C., has very kindly prepared for the author a detailed account of his ant collecting at Hill City and vicinity and the conditions under which it was done. His statements read as follows:

"In 1890 and 1891 I lived in Hill City on Spring Creek, Pennington County, South Dakota as assayer to the Harney Peak Tin Company and spent much of my leisure time collecting myrmecophilous beetles and their hosts, the ants, for my father, Henry Ulke of Washington, D. C. These I forwarded to Washington where my father separated the ants from the beetles and turned them over to the government entomologist, Theodore Pergande. He in turn sent them to Dr. Carlo Emery of the University of Bologna, Italy, who named the specimens and described the new species I had discovered, including one in my honor, *Formica ulkei*."

"My collecting ground, lying approximately within a radius of a dozen miles of Hill City, was rather varied in nature, including grassy open parks, wooded hills, and barren rocky slopes. In the open parks grew tall and handsome Western yellow pine (*Pinus ponderosa*) under which the ground was usually covered by thick mats of pine needles or tufts of Buffalo grass (*Boutelouya oligostachys*) and old decaying logs, in and under which the ants liked to nest. The soil was sandy, the land arid, but the climate mostly fine and sunny, light cooling rains falling frequently from 2 to 4 P. M. on warm afternoons.

"About 8 miles south of Hill City arose Harney's Peak, a pic-