records, and those of Holmgren, this ecitonophile seems to be characteristic of *hamatum* armies and widely distributed, though the number of individuals in a colony is not large.

*Mimopria* is undoubtedly parasitic on its host, probably on the immature phases. Like many other ecitonophiles it closely resembles the ant both in form and in manner of progression and in the possession of some quality that ingratiates it with the host. *Eciton* being altogether carnivorous it is possible that *Mimopria*, like certain other myrmecophiles, takes no food during the imaginal stage of its existence.

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**SPHEX OVERCOMING OBSTACLES.**

**By C. H. Turner, Ph.D.,**

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The front yard of one of the public schools of Wellston, Missouri is bordered on the south by a low picket fence and on the west by a four-foot fence constructed of upright boards placed close together. Between the school house and the front fence there is a fifteen foot lawn. About ten feet west of the board fence and at about the same distance from the street as the school there is a wooden cottage the first floor of which is about four feet above the ground. The space beneath this house is walled in so as to form a cellar.

At about noon, June 28, 1911, I discovered a digger wasp (Sphex sp. ?) moving backward and dragging a spider across this school lawn. The wasp continued her westward course until she had backed into the wooden fence. Then, after depositing the spider in the grass, Sphex flew over the fence and descended obliquely towards the northwest until she had reached the door of the cellar mentioned in the first paragraph. After pausing there a moment, the wasp returned to the school yard, picked up the spider and began to climb backwards up the fence. Everything moved along smoothly until the upper scantling to which the fence boards were attached was reached. (Inequalities in the lawn made it possible for the wasp to mount the lower scantling.) Sphex tried and tried but she could not back over that scantling with her burden. She
then descended to the ground, deposited her spider in the grass, made a short flight of orientation and then revisited the cellar door.

Returning to the school yard, the wasp picked up the spider and began to drag it up the fence. Soon she backed into the upper scantling and found it impossible to climb over it with her burden. This time, however, she did not return to the ground; but, changing her tactics, Sphex backed away towards the south until she reached the corner of the fence, which was fully six feet away. Then backing towards the east, she moved along the front fence until she had arrived at the space between two pickets. Still dragging the spider after her, the wasp backed through to the outside of the fence. Turning around the wasp moved westward and downward until she reached the ground at the southwest corner of the fence, where she deposited her spider in a clump of grass. After making a short flight of orientation, the wasp flew, in practically a straight line, to the cellar door. The line of flight on this occasion made an angle of about 45 degrees with the line of her former flights to the door.

Soon Sphex returned to the fence corner, seized the spider by its pedipalpus and, walking backwards, dragged the spider across the ground to the cellar door. There she deposited the spider on the ground and, after a short flight of orientation, flew to and examined the door. Returning to the spider, the wasp attempted to drag it to a crack at the top of the cellar door. The task seemed to be too difficult, and, after several failures, the wasp placed the spider on the ground, and, without making a flight of orientation reexamined the cellar door. Returning to the spider, she attempted to drag it to an opening that was much nearer the ground; but was defeated by a scantling over which she could not drag her burden. Depositing the spider on the ground, she flew to the door and soon found another opening. When she attempted to drag the spider to this opening, she was prevented by another piece of scantling. Once more the spider was returned to the ground while the wasp made another careful examination of the cellar door. Returning to the spider, Sphex picked it up and, moving backwards, dragged it to a knot hole in the door and passed into the cellar with her prey.

The behavior of this wasp does not harmonize at all with the