

eliminate our drones as effectively as they do theirs. And man's latest triumph, the conquest of the air was long ago consummated by the spider. It is true that the little spinner's flying thread is at the mercy of the wind, and is not susceptible of direction like the aeroplane or the dirigible, but still it enables him to travel astonishing distances with ease and celerity.

In the last week of September, 1911, an immense number of "gossamer" spiders appeared in the district around Arnprior. Every fence in the town and for at least five miles out into the surrounding country was streaming with the exceedingly tenuous lines of the little weavers. The threads, which were from about 5 ft. to 20 ft. long, were so fine that they would only be seen when the sun glanced on them at a certain angle, but when the eye caught them they looked like long ghostly hairs blowing out in the wind. Examination showed that nearly all the threads were anchored by one end to the fence rail or wire, and that the spiders were running about actively, but in a somewhat aimless manner. But here and there one of the little line-weavers still had the thread attached to his spinneret, and with his head to the breeze, which was so gentle as to be scarcely perceptible, allowed the thread to float out behind him. Presently he raised himself as high as possible on his tiptoes, at the same time elevating his abdomen until he was almost standing on his head. This seemed to be done to try if the thread waving behind him in the wind was sufficiently long to float him, and if its pull was not strong enough, he apparently spun out a little more. After raising and lowering himself several times in this manner, he suddenly let go his hold on the fence and floated quickly away on the end of the line, taking a course at an angle of about 45° with the horizon, and in a few seconds was out of sight. Who can say how far he went? Darwin in "The Voyage of Beagle" records large numbers of such aeronauts sixty miles at sea off the coast of Patagonia. Those the writer observed took a course S.E. Perhaps they reached the St. Lawrence or even entered the United States.

It was formerly thought that this "ballooning" was peculiar to one species which was called the "gossamer" spider, but it is now alleged to be common to the young of many different species including several distinct families. Some spiders are said to spin out three or four diverging threads onto the breeze, but those the writer saw were contented with a single line each.

CHARLES MACNAMARA.