

Strange Eyes of Nature's Creatures

By John D. Ritchie, Wallwort.



HAVE YOU EVER watched the whirligig beetles gyrating on ponds and streams? Did you ever capture one and examine it closely? If you haven't you will find that this little water-beetle has a most marvelous pair of eyes. Catch one sometime and examine it with a pocket lens. It looks like a diminutive black bean. Now look at its eyes. Unlike a bee or a dragonfly the eyes do not curve down over the sides. Although wide apart, they are still some distance from the margin of the head.

In his marvelous little book, "Hunting with the microscope" Gaylord Johnson writes; "Turn the little beetle over and look carefully on its underside—the side that is in contact with the water when it is rushing in rapid circles. Remarkably enough the whirligig seems to have another pair of eyes upon the underside of its head—a pair of 'water telescopes' so that no matter how the breeze stirs the surface or how many ripples it makes itself, it can always see its prey in the water below with its under pair of eyes, while the upper pair is watching out for danger from the air. Actually, however, there is only one pair which are divided inside the beetle's head—one part extending to the upper surface and the other to the lower surface."

Birds can see with closed eyes as they have an extra pair of transparent eyelids. This is true also of the "Ship of the Desert" the camel.

The eyes of birds never look in the same direction for their eyes are at the sides of their heads. This is true of all birds except the owls, which have eyes in front of their heads and cannot roll them because they are fixed in their sockets. The neck is so constructed that the owl is able to face back to front at will, thus it actually sees in more directions than other birds.

A chameleons eyes are socketed independently. It can look forward and upward with one eye and at the same time backward and downward with the other.

A crab's eyes are at the ends of stalks and can be drawn in when danger threatens. The snake has no eyelids, so never closes its eyes. There is a lizard, native of New Zealand, having three eyes. The third is vestigial and scientists believe that in the higher animal this has become the pineal gland.

"May I congratulate you on the new size and set-up of the BLUE JAY.

I was with my daughter (Mrs. Isabelle M. Priestly) when the first number was started, and all her life we shared the great love of nature study together. So you will understand my great interest in the paper. I am proud she has such a fine memorial, that will continue to improve under your guidance."

Mrs. J. M. Adnams, Victoria.

"I was delighted that you had the opportunity of bringing out the first issue in such an attractive form. I am sure many people would subscribe if they knew more about your publication and I am planning to make mention of it in our pages."

Rose Ducie, Women's Editor,
Western Producer.

"I feel personally that you are doing an extremely good job with this publication."

R. O. Hedlin, Associate Editor,
The Country Guide, Winnipeg.