

lost her fears for the camera. Plate after plate was snapped but her movements were always very rapid and weather conditions are not always of the best in Oregon.

As I sat in the bushes by the nest with the camera by my side I had almost as good a chance to study the marking of her dress as if I had held her in my hand. She would alight on a twig three feet away and I often saw her orange crown when she ruffled up her feathers in inquiry or alarm. It seems strange that such a delicate tinge of orange should be hidden just as if it would fade away in the sunshine. Maybe in time when this fidgety little fellow has reached a higher stage in the evolution of his existence he will flit about the trees in a real cap of gold.

Portland, Oregon.



NEST OF LUTESCENT WARBLER

Bird Surgeons

BY W. OTTO EMERSON

IT was only a stray bone of a peculiar shape among the drift along the Monterey beach that attracted my eye—a bone differing from hundreds of others that may be found in a locality where dead birds are cast ashore by the waves. On a closer examination it was seen to be the humerus of a bird as large as a gull or a cormorant, and it had been broken at some stage of its life.

I at once recalled the many mythical tales of birds being able to care for their broken legs or wings by binding or wrapping them with hairs, feathers, and other handy materials. A citizen of Cleveland writes, for one of the Cincinnati papers, an account of his finding two young swallows in his barn. One of them had a leg thoroughly bandaged with horse hairs, presumably accomplished by a parent. He carefully removed the hairs, one by one, and found that the nestling's leg was broken. On visiting the nest next day what was his surprise to find the young swallow's leg bandaged as before. The bird surgeon was not again interfered with, and in about two weeks he found that the horse hairs were being removed, a few each day; and finally when all were off, the union of the bones was evidently perfect.

Another case is cited from "Youths' Chronicle." A French naturalist writes that on a number of occasions he has shot woodcock which were found to be convalescing from previously received wounds. This naturalist goes on to state that

in every case he had found the wounds neatly dressed with down plucked from the feathers, and arranged evidently by the long bill of the bird. In some instances a solid plaster was thus formed, and in others "bandges" had been applied to wounds or broken limbs. One bird shot had been severely wounded at some recent period, and had been protected by a sort of net work of feathers taken from the bird's own body, so arranged as to completely cover the wound. The feathers were fairly netted together, passing alternately under and above each other, forming about the broken limb a textile fabric of strong binding power.

Might it not be more reasonable to conclude, in the case of the swallow, that the young bird had entangled itself with some horse hairs that were used in the nest and had broken its leg, while the Cleveland citizen happened too observe the bird's condition and regarded it as a piece of wonderful animal intelligence? A case similar to that of the wounded woodcock has come under my personal observation. This bird was a female valley partridge (*Lophortyx californicus*). As I was coming down a ridge one November day of 1901 this quail fluttered along almost under the horse's feet, and then escaped into the tall, dry weeds where I captured her. She had been in some way hurt above and below the knee, from



either a shot or a trap. The bird, on getting away into the thick brush naturally drew her wounded leg up under the flank feathers. The oozing blood would cause the soft downy parts of the feathers to adhere and dry onto it. Then as the bird felt the need of food or was obliged to move, she would lower the leg to use it, when off would come a few feathers adhering to the wound. This would also cause some parts of the wound to bleed afresh, and more soft down with bits of fine dry grass and dirt would be added as the bird crouched down, forming a regular cast or bandage. This seems to be the explanation of many cases of natural surgery, and was certainly what happened to the quail.

I recall also the case of a male Brewer blackbird (*Euphagus cyanocephalus*) taken one winter. The leg had been broken midway above the knee and the ends of the bones had slipped by each other and healed, the muscles holding them in place. Another specimen had no toes on one leg, there being a stump.

This brings me back to the bone picked up on the beach. A cut is here given showing the overlap, between the two dotted lines, where the healing has taken place. The bone had been broken in some manner, had turned half way around, slipped together about an inch, where by some means or other it had been kept until it had grown together. On the lower side the splintered bone may be seen in wedge-shaped form. The humerus is three inches long as healed and some four inches long in its natural condition.

Haywards, California.

A List of Summer Birds of the Piute Mountains, California

BY C. H. RICHARDSON, JR.

DURING the summer of 1903, I spent a month's vacation in the Piute Mts. These mountains consist of a single range, lying between the Tehachapi Hills and the Sierra Nevada mountains. My headquarters was a small cabin about six miles northwest of the Piute post-office. The hills which surround