

with tall peaked hats. In passing a goat pen we persuaded the white-bearded goatherd to take a dime for a cup of goat's milk though he urged that it was worth only *un centavo*. A jolly party of Mexicans traveling in a prairie schooner camped by our water tanks.

Here we saw our first tropical and sub-tropical White-winged Dove, a bird which afterwards grew rapidly common. In hooting it sat on a branch and puffed out its throat emitting its curious hollow, cavernous *whoo-hoo'-hoo-hoo'*. A nest that we discovered was in a huisache over flood water about six feet from the ground.

Beyond Sauz Ranch a new effect was given to the woods by the butterfly tree (*Parkinsonia aculeata*). It had been only in bud at Petranilla Creek a week before, but we were going south and it was here in full bloom, its jessamine-like yellow flowers having a delicate fragrance. A *Salvia* also added a bright touch to the woods, and outside the magenta poppies increased in numbers.

(To be continued)

A HOSPITAL FOR WILD BIRDS

By DR. W. W. ARNOLD

WITH TWO PHOTOS BY THE AUTHOR

ONE OF the most delightful sequelae to my efforts to interest school children in bird-life and its protection, was the establishment of a hospital for the care and treatment of wild birds suffering from what might be termed the normal catastrophes which happen to vast numbers of our feathered brothers as they journey from their embryonic egg-shell home to the grave. For a number of years I had been devoting much time and attention to arousing general interest in the welfare and protection of bird-life, through talks on birds, illustrated by lantern slides and mounted specimens; but it seemed impossible to arouse a permanent interest and abiding enthusiasm in the children until I adopted the plan of taking the live birds that had been restored from some accident, and showing them to the children, at the same time reciting the life-histories of the feathered patients, the character of their injuries, and the method of treatment carried out for their relief. This plan met with an immediate response, and the children deluged me with such numbers of crippled birds that I was compelled to erect a commodious aviary (fig. 50), and to call into use a large number of small cages for the accomodation of the seriously injured.

Within twelve months the size of the hospital had to be doubled to accomodate the feathered patients; and following the heavy hail storm occurring July 18, 1915, I was completely swamped and had to resort to all kinds of devices to furnish shelter for the flocks of battered and broken creatures brought to me by the children. Forty-five robins suffering from broken wings, broken legs, eyes knocked out, and bodies battered and bruised, refrigerated by ten or twelve hours spent in windrows of hail stones, were brought to the hospital for treatment; and fifteen miscellaneous victims—bluebirds, finches, black-headed grosbeaks, yellow warblers, red-shafted flickers, meadowlarks, tana-

gers, orioles, doves, sparrows and two Calliope hummingbirds rounded out the grist of this dreadful bombardment of icy bullets. The fatality in this group of patients was very heavy, due to exposure to the ice-water bath they were subjected to for so many hours, which seemed to have developed pneumonic conditions.

A more pitiful sight than those forty-five injured robins, with their bound-up broken wings and legs, could hardly be imagined, and what touched my heart most deeply was the immediate response they manifested to my efforts for the relief of their sufferings. Within thirty-six hours they had lost all fear of my presence, and when I would approach the hospital and call to them, "Hello birdies, do you want your dinner?", every head would go up, and a joyous note in answer greet me. Then, as I opened the door to pass in the cherries, earth-worms and boiled bread and milk, they would rush pell-mell upon the waiter and begin devouring the meal in voracious manner. Their jousts at feeding time were highly amusing and revealed robin nature as I had never seen it before. The tug-of-war which ensued when two birds grabbed opposite ends of the same angle-worm, was the occasion of hearty merriment.

A souvenir of this hail storm was brought to me but recently. It is a mother Yellow Warbler covering her nest with out-stretched wings, a record of vain endeavor to save the lives of her infant babies. Her life

was blotted out instantly by the impact of an icy bullet on her head, and there in this attitude of loyal devotion to her home, she found her sepulchre, the dry atmosphere absorbing the liquids of the body and mummifying it.

A fledgling robin suffering from a fracture of the right wing proved to be one of the most interesting of all my feathered patients. He was dwarfish not only in body but in mind, also possessing an irascible temper which was constantly in a state of explosion. He was so restless and fidgety, and dashed about so recklessly, that he kept his plumage in a dreadful state of dilapidation, and his wing feathers were so frazzled he could not fly, and his tail was



Fig. 50. A HOSPITAL FOR CRIPPLED BIRDS MAINTAINED BY DR. W. W. ARNOLD, IN COLORADO SPRINGS, COLORADO

so demoralized and abbreviated that he was naturally nicknamed "Bobby". Feeding time was the opportune occasion for displaying the foolishness of his temper. As long as he was sole guest at the festal dish, and was shoveling into his stomach mouthfuls of food with a voracity suggestive that one minute was the limit of his life tenure, all was well; but the instant his companion, the Western Meadowlark, attempted to partake of the boiled bread and milk and scraped beef, Bobby was instantly transformed into a veritable fury, and would fly upon the lark, peck, scratch and kick it, using his legs just the same as a rooster, until the poor, timid creature would creep away into the farthest corner of the cage and wait until Bobby had stuffed himself into a

condition of stupid indifference. Bobby was one of the most forceful of all of my "golden texts": I call the recovered feathered patients, which I display to the children, giving the life history of each bird, "golden texts". Bobby's horrid table manners and exhibition of temper furnished endless suggestions for my sermonettes. He finally died from the effect of a prolonged bath which he insisted on taking one cold evening in early May.

From a scientific point of view an American Bittern which I had under treatment for several months yielded the greatest satisfaction and interest. While passing across the State to his breeding grounds, he was attracted by the inviting scenery and restful appearance of the land lying at the foot of Pikes Peak, and concluded to stop over for a few days recreation. Scarcely



Fig. 51. A CRIPPLED AMERICAN BITTERN; STUMP OF UPPER MANDIBLE HEALING AFTER SHOT WOUND

had he commenced to investigate the chances for a dinner along the shores of one of our numerous reservoirs, before "a boy and gun" appeared upon the scene, and the next instant the poor creature was tumbling about with a disabled wing, while the upper mandible was shot in two about midway, held from separation merely by the soft tissues. As a matter of experiment the fractured mandible was adjusted and properly held in place by splints, but within a week's time nature had amputated the dead point. Then curiosity to discover what effort nature would make to repair the broken member induced me to continue to care for the bird (see fig. 51).

As it was impossible for the poor creature to feed himself it became incumbent upon me to assume the functions of foster father, and I soon discovered I had a big contract upon my hands, for the mutilated mandibles had to be pried apart and the food thrust down his remarkably capacious gullet several times daily. Not once was this process performed without vigorous protest on his part, and the sounding forth of his bellowing notes. His mimicry was fascinating and ever a source of interest and amusement, especially when he realized that he was not fooling you and would descend from his statuesque attitude, and suddenly, by a trick of feather adjustment, assume three times his normal proportions, uttering a roar of disgust and resentment. Nature made a feeble effort to reproduce the destroyed horny material of the bill, the result being a thin nail-like projection a little over half an inch long. After several months the bittern's appetite began to fail and he died of inanition.

Quite a large number of feathered patients, consisting of house sparrows, finches, horned larks and western meadowlarks, were recorded in the hospital during the early summer months as victims of the screw-fly maggot, a marked increase being noted the present summer. This fly has a deadly method in the deposit of its eggs, which are hatched in the process of insertion into the flesh of its victim, regions being selected largely inaccessible to the beak of the bird. The inner corner of the eye, the top of the head, the neck, and the under sides of the wings seem to be the favorite locations selected by the fly, although some of the victims were simply dotted all over with the worms. I never observed any of the worm-infested birds making efforts to remove the maggots, or giving evidence that they were suffering from local irritation or discomfort, but all seemed to be stupid and drowsy as though under the influence of septic poisoning.

Two fledgling western meadowlarks found wandering quite a distance from their nest, were found to be literally alive with the horrid maggots, one yielding twenty-six and the other twenty-four specimens. Very few of these fly-stung birds recovered, even when relieved of their deadly messmates, septic conditions prevailing to a fatal extent. To me the remarkable thing about this maggot is that it immediately abandons its victim as soon as death ensues. Human beings are infested as well as birds and mammals. A child a few months old while being wheeled in its carriage through one of our parks cried out suddenly as if in pain, and the mother noticed a screw-fly dashing against the face of the infant. By the time the mother reached my office with the child I found half a dozen of these microscopic maggots burrowed half their length in the skin of the baby's face.

My bird hospital has furnished me with an endless number of incidents and anecdotes of bird life which I treasure up for the enjoyment and edification of the school children, who, many thousand in numbers, have become my faithful and loyal coadjutors in the care and protection of bird-life. And through this glorious service for our feathered brothers, the birds, I have garnered the sweetest joys of life, and prolonged my years beyond man's allotted time.

Colorado Springs, Colorado, August 7, 1916.