

Photographing Birds

BY
B. S. BOWDISH

Photography is one of the newest methods in the study of birds. Up to a very few years ago apparently no one had given much thought to the possibilities that lay in the use of the camera among the feathered folk, in depicting them and their entertaining ways. In 1900 there appeared "Bird Studies with a Camera," by E. M. Chapman, one of the early pioneers in this use of the camera. In 1902 "The Home Life of Wild Birds," by F. H. Herrick; "Nature and the Camera," by A. Radcliffe Dugmore, and "Nestlings of Forest and Marsh," by Irene G. Wheelock, were brought out. Since that time a number of books of such nature and many magazine articles illustrated by reproductions of Nature photographs have appeared.

In many branches of photography certain rules may be laid down, the following of which is a comparatively easy matter and means success, but in nature photography, and particularly in photographing live birds, the element of chance has never been overcome, nor is there any apparent likelihood that it will be. Mr. William L. Finley, of Oregon, one of the most highly successful bird photographers in the country, who has a very extensive collection of beautiful results of his work with the camera, says that he has wasted thousands of plates, and he considers that with the best apparatus and the utmost skill one may expect to expose an average of a dozen plates for each thoroughly good negative secured.

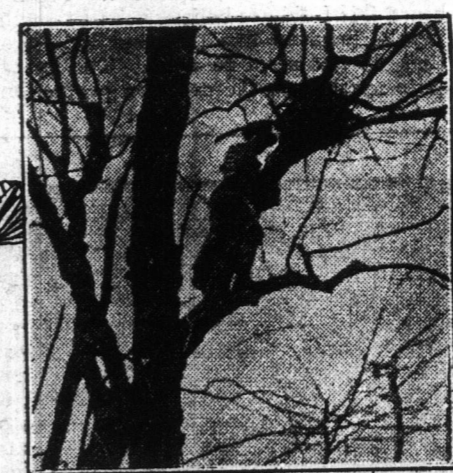
There are some few birds which, under favorable conditions (usually with young or eggs in the nest), afford comparatively easy subjects for the photographer, but, for the most part, birds are very shy and suspicious regarding a camera.

With some species it has been found nearly or quite impossible to get them to come to their nests while camera and operator were near, even though both were well concealed. Mr. Chapman introduced a portable blind for concealing camera and operator, which has been widely adopted with various modifications, and which has contributed greatly to the success that has been achieved in bird photography. This arrangement consists of an umbrella, the handle set in a telescoping brass rod, one end of which is sharpened to push into the ground, the middle of the umbrella top being left open for ventilation, and a round tent of green cloth, gathered at the top, is draped over the frame and falls to the ground. These tents offer no rude contrast to natural surroundings, and they may easily be draped with branches or vines; making them still less conspicuous. Small slits for peep-holes or to admit the lens of the camera are made in the walls of the tent as desired.

No single rule applies, even with different individuals of the same species of bird. The



CAMERA WITH TELEPHOTO ATTACHMENTS FOR LONG-RANGE WORK



ONE WAY TO PHOTOGRAPH BIRDS NESTS



AN IMPROVED LADDER OF CORDWOOD

THE FOCAL PLANE CAMERA IN OPERATION

bob-white has usually been found an easy subject for photography when sitting, yet the writer found this to be far from the case with one of these birds found incubating her eggs on June 7, 1906. This bird was very wild and successfully frustrated all efforts to photograph her. The hundred feet of rubber tubing and bicycle pump, which has so often been successfully used to operate the camera from a distance, was brought into play, but, though the camera was very carefully covered, she refused to go on her nest while it was there. An arched-topped tin and wood cover was then made and painted green. This could be placed over the camera, entirely concealing it except the lens. A "fake" camera was placed under this blind and left there for several days for the bird to become accustomed to, when the real camera was substituted, but Mrs. Bob refused to be trapped. Finally, the camera was left in position over night, and, though the bird was on the nest when the exposure was made the next morning, she moved so badly as to spoil the photo. Despite this disturbance of her household affairs, Mrs. Bob hatched sixteen young Bobs.

Some bluejays are bold about their nests, and allow photos to be made without much difficulty; others are almost impossible subjects. One of the great difficulties in photographing many birds on their nests is the fact that the nests, being in the shade, the light will not admit of a "snap," and the bird spoils the time exposure by movement.

A very convenient thing in photographing birds and their nests is a clamp instead of a tripod, by means of which the camera can be

attached to the limb of a tree. The writer has used two kinds with satisfaction, a ball and socket and a simple type of pocket clamp.

One spring it was noticed that a pair of bluebirds were seeking a nesting-place around the barn, and a box was hurriedly put up just over the upper floor window.

The birds immediately took possession, and after the young had been hatched out a bracket was fastened up about four feet from the box, to which a camera could be screwed, the tube running back through the window. Back in the shadow of the interior the operator could watch the arrivals of the parents with food, and make exposures. Some six or eight negatives were thus secured, and at the same time a record was kept for several hours of the time periods between the trips of the parent birds. A bird box at the back door of the house gave an opportunity for similar study and photographing, with a pair of house wrens as subjects.

Where it is necessary to make a time exposure on a sitting bird some method must be found to overcome the sudden start that the bird is almost sure to give at the opening click of the shutter. The writer has sometimes accomplished this by "stopping down," necessitating an exposure of fifteen to thirty seconds. If the bird gives one start at the opening click of the shutter and then sits expectantly, the movement is covered by such a small part of the time of exposure as not to show in the picture. Some birds, however, continue to move nervously, and there is no alternative but a "snap" with open diaphragm, which in such situations is too apt to mean a hopeless under-exposure as well as no depth of focus.

One ingenious bird photographer, to overcome the start of a cedar waxwing at the shutter's click, hung a clock under the camera and left it until the bird became accustomed to the ticking, so that she took no note of the extra click of the shutter.

Perches have been arranged close to the nesting sites in such a way that when a bird lit on the perch it was depressed and closed an electric circuit, thereby setting off the shutter. For operating the camera from a distance a thread has sometimes been used in place of the long rubber tube and bicycle pump, though less convenient than the latter.

Such birds as hawks are very wary, and it is difficult for the photographer to conceal his presence, even near enough to the nest to operate the camera with tube or thread. One bird photographer secured very successful

photographs of a pair of red-tailed hawks by passing a string over the nest, one end running to the camera and the other to a limb, so that when the birds stood or sat on the nest they drew the string taut and made the exposure.

Where it is necessary to have the camera some distance from the bird to be photographed, the ordinary lens gives a picture too small to be of value. If the lens be a compound one, one part or the other is sometimes used single as a "long-focus combination," whereby the size of the image is magnified considerably. The "telephoto" attachment is also used for this purpose, allowing a magnification up to three and one-half times the result obtained with the regular lens.

The focal plane shutter cameras have been a boon to the nature photographer, and results have been accomplished in the way of photographing flying birds, even to the extremely rapid wing movements of the hummingbird, which would otherwise have been absolutely impossible. With these cameras the operator can focus on his object right up to the second of exposure, and the quickness of the focal plane shutter is supposed to range well above a thousandth part of a second.

The experiences of the bird photographer include glad surprises, the securing of an occasional seemingly impossible, splendid photograph, the incidental acquisition of a great deal of delightful knowledge of the ways of the birds—also bitter disappointments, the hard-earned work and the most extreme fatigue, with the occasional risk of life and limb on the face of the cliff, the dizzy height of the tree top, or the treacherous moccasins of swamp or marsh, whither his quest leads him. At his ease in his home he may operate the camera on his lawn, securing the family portraits of the chipping sparrow or robin, but he must also be prepared to remain for hours motionless and noiseless, in a cramped position, hidden in his blind in the woods, while the heat seems to be rapidly converting him into liquid lard, flies promenade over his nose, and myriads of mosquitoes hold family reunions and festivals on his defenceless person, and the bird whose portrait is so earnestly coveted tantalizingly meditates just outside of the camera's range. He must be prepared to try, day after day, for a satisfactory photograph of some subject that seems ever to elude him, and to search in vain for a nest of some species that the "other fellow" got a fine photograph of.

One June the writer found a nest of the scarlet tanager, and the better part of four

afternoons was spent in trying to secure a photo of the bird on the nest, but she frustrated every effort.

Hunting with the gun has exterminated the buffalo, the great auk, Labrador duck, and has almost exterminated most of the larger four-footed game, and many of the birds. It has robbed posterity of just that much, and has left the hunter richer in nothing but memories, which can hardly be altogether pleasant. Hunting with the camera destroys nothing, and leaves the hunter perpetual trophies of scientific and esthetic value, gives him the most healthful diversion, and insures delightful memories. The time must come when for hunting the camera largely, if not entirely replaces the gun.

Do not, however, imagine that, with the prevalence of camera hunting there will be developed the same sort of "sport" as obtains with gun shooting. I cannot but think that, with the gun, there is a certain delight in the act of killing. It is indeed fortunate that nothing of the kind can arise in camera hunting. The camera hunter will have for his reward not the sense of bloodshed and life extinguished, but the reward of achievement. And this achievement must, in many cases, and certainly for very many years to come, be unique and original in a very striking and wonderful manner.

Bird life, and indeed all animal life, is still largely unphotographed. This means that its most intimate phases are utterly unknown to us. The camera thus opens up a marvelous field for adventure and discovery which would seem well nigh inexhaustible.

And can it be pretended that there is not interest, and a world of interest, in the opportunity thus offered the sportsman? A new kind of sportsman, it is true, but a very real one, nevertheless, who will go out into Nature's wilds, into the fields and forests, and bring back to his study and his friends permanent records of bird life of unending interest and amazing novelty. Surely there is "sport" in work of this kind, just as there is value.

So much the future has in store for us in work of this description. Work that is a pleasure and work that is helpful too. Already much progress has been made in the art of bird photography and many interesting and valuable facts have been discovered. But there is still much to do, much to learn, much to ascertain. The camera hunter has the whole world before him.

Blind Fish of St. Bothwell

St. Boswells of today, Lessudden of old, is a small village well known to thousands of disciples of Isaac Walton, for it is there that the angler has access to the best free trout fishing that the beautiful Tweed affords. And it was here that one of the most wonderful anglers Tweedsides ever knew lived and died. His name was William Rankin, the blind fisher, whose remarkable feats with the rod and line were the wonder of beholders. Rankin was born and brought up at Lessudden some eighty years ago. At a comparatively early age his sight was completely lost to him through a severe attack of smallpox with which he was afflicted while in London, for Rankin was given to traveling about a good deal. After recovering from the malady Rankin returned to his native village and there spent the remainder of his life. He was recognized as an authority on all matters pertaining to angling, a sport of which it was his nature to be passionately fond, and in spite of his blindness he was one of the most successful fishers that ever threw a line on the Tweed. Not only did Rankin practice the gentle art to perfection; he was also given to making various kinds of fishing tackle, flies, rods, etc. He was recognized by the villagers and by visitors to the village as a capital rod maker and he frequently executed orders for rods from well known Tweedside gentlemen.

Hearing and Touch Highly Developed.
Rankin seemed to have a marvelous command over the faculties of hearing and touch, the development of which made up to a certain extent for his want of sight. He was given to wandering about the village and by the banks of the Tweed unaccompanied, and appeared to know every inch of the ground on which he walked. Although when fishing he preferred to angle from the bank, he not infrequently waded into the water if he thought it necessary. Not once during his many expeditions to the river did he meet with mishap. The secret of this was no doubt the fact that he knew his ground so well, for he always made a point of fishing the same pools every time he fished.

He could practice the majority of the various forms of angling with almost equal success, but he preferred to angle with the natural minnow, as in his hands it was the most easily used of the lures, besides being very deadly. His mode of fishing the minnow was different from that of the generality of anglers. He did not spin the minnow by the aid of the rod. Instead, he placed a minnow on the spinner, shot it well into the pool and allowed it to sink. That done, he held the rod in his left hand, and with the other worked the bait to the side by pulling the line slowly through the rod rings and allowing it to fall in coils at his feet. By this method Rankin got a good command over the line as well as a suitable spin on the minnow and his success was on occasions phenomenal.

Nearly always he had far better baskets of trout than any of the other anglers of the village, his catch for a single day's sport sometimes amounting to as much as 30 pound of splendid trout. Of course, it cannot be forgotten that trout in Rankin's day were much more unsophisticated than they are now; nevertheless, such a fact does not much lessen the wonder of the blind man's splendid achievements.

Naturally, it was when the river was in good condition for angling that Rankin's success with the rod was greatest. Being principally a minnow fisher, he loved, in common with other anglers, the porter colored water at the subsidence of a spate. When this occurred in the back end of the year or in the spring, there were usually large numbers of sea trout in the pools, and these fish Rankin sometimes caught with considerable freedom. On two successive days in the spring of 1879 Rankin killed with artificial minnow no fewer than nine sea trout, which together with a few yellow trout, scaled 36 pounds, when weighed at the village in the presence of a large number of anglers. On another occasion while fishing with fly in the vicinity of Mertoun bridge, he hooked eight sea trout, landing five of them, and once he caught with flies of his own make ten trout averaging ¾ lb. each, all taken from one stream.

Sometimes He Hooked Salmon.
But Rankin's sport was not confined to yellow trout and sea trout only. Many a read-

er may not credit my statement, but I may say it has been given to me on irrefutable authority that Rankin also hooked and landed salmon with minnow. In November, 1877, for two days' fishing he had five salmon and four sea trout. Two of the salmon scaled 22 lbs., each and other was 13 lbs., while the heaviest of the sea trout weighed 7½ lbs.

Associated also with St. Boswells are the names of John Younger, and his son William Younger. The former wrote an excellent work on fishing, "River Angling for Salmon and Trout." The Youngers were both expert anglers, and William was a great friend of Rankin's, often accompanying him on his expeditions to the river. Sometimes when Rankin hooked a large fish and got into some difficulty with it, William Younger would offer his assistance. But Rankin did not like to be assisted. He liked best to hook, play, and land his trout or salmon entirely by himself, and rather than be aided by anyone he would run the risk of losing his fish. For it was the blind fisher's nature to do everything as though he had the power of vision.

Rankin's Methods.
His method of landing his quarry was interesting. After "running" his trout until he got to know by instinct that it was tired out, he brought it to the side, and then to find where it lay stranded he held the rod well up with his right hand, ran his left down the line, and grasped his fish, loosened the hooks from its jaw, and popped it through the hole in his creel.

With salmon he naturally experienced more difficulty. Still Rankin never allowed the "king of fishes" were scope then any angler with his sight would allow it and when the shining silver creature was brought dead beat on a bed of shingle, Rankin just felt his way towards it by the aid of his fishing line, and seizing it by the gills, heaved it on the bank.

This wonderful blind fisher, it may also be pointed out, was always careful not to angle where the river was overhung by trees or other obstacles, and thus minimized the difficulties which to any ordinary angler might have seemed to be in his way. Rankin was a man of the most kindly disposition, and he was only too pleased to give advice to any-

one on angling matters, but he was always slow to speak of his own exploits with the rod and line. He did not like people to think that under the circumstances in which he was placed he did anything wonderful in dressing hooks or landing fish unaided; he gave you the impression that he wished earnestly to be recognized as a man who was the very opposite of blind.

Such was William Rankin, the blind fisher of St. Boswells, a man whose name and whose doings by Tweedside will never be forgotten by those who interest themselves in the annals of border angling.—W. S. B.

CURIOUS FACTS ABOUT SAND

A very interesting fact about the ordinary sand of the seashore (writes Sir Ray Lankester) is that a pint of dry sand and half a pint of water when mixed do not make a pint and a half, but a good deal less. If you fill a child's pail with dry sand from above the tide-mark, and then pour on to it some water, the mass of sand actually shrinks. The reason is that when the sand is dry there is air between its particles, but when the sand particles are wetted they adhere closely to each other; the air is driven out, and the water does not exactly take an equivalent space, but occupies less room than the air did, owing to the close clinging together of the wet particles. If you add a little water to some dry sand under the microscope, you will see the sand particles move and cling closely to one another.

"Capillary attraction"—the ascent of liquid in very fine tubes or spaces—is a result of the same sort of adhesive action. If you walk on the firm, damp sand exposed at low tide on many parts of the seashore when it is just free from water on the surface, you sand becomes suddenly pale for some seven inches or so all round your foot. The reason is that the water has left the pale-looking sand (dry sand looks paler than wet sand), and has gone into the sand under your foot, which is being squeezed by your weight. The water passing into that squeezed sand enables its particles to sit tighter or closer together, and so to yield to the pressure caused by your weight. You actually squeeze water "into" the sand, instead of squeezing water "out" of it, as is usually the

case when you squeeze part of a wet substance—say a cloth or a sponge.

When you lift your foot up, you find that your footprint is covered with water—the water you had drawn to that particular spot by squeezing it. It separates as soon as the pressure is removed.

ATTACKED BY A VIPER

An extraordinary occurrence is reported from the moorland district near Chatsworth House, which the Duke of Devonshire visited after attending a fair at the hilly village of Daddington, near Buxton, on Thursday. The medical officer of health for Chesterfield (Dr. Herbert Peck) in the afternoon drove to Ramsley reservoirs in order to carry out certain investigations. He had two of his children with him, and was explaining to them certain botanical specimens which he had secured. He saw what he thought was the bilberry bushes, and attempted to pick it up to show the children. But being an ardent naturalist as well as a botanist, he immediately noticed that the reptile was an English viper. Before he could get away it fastened itself to his wrist, and struck him three times, the virulent poison being injected into both his hands. Dr. Peck at once endeavored to suck the wounds, and applied a ligature. His trap was some distance away, and a good deal of time elapsed before he reached Ramsley Lodge, near Bawdon. Dr. Edleston was hastily summoned, and found the medical officer in an alarming condition. He applied all the usual remedies, and sucked the wounds himself, but ordered the immediate summoning of friends from Chesterfield. Yesterday it was reported that there was a chance of the doctor's life being saved. It will be some time, however, before he will be able to be removed from Ramsley Lodge to his home at Chesterfield.

"I admit I have the fault you mention," said the conceited man, self-complacently, "but it's the only fault I have, and it's a small one."
"Yes," replied the candid friend, "just like the small hole that makes a plugged nickel no good."

Mount

Seven years have passed discharged its torrent of lava town of St. Pierre and laid considerable portion of the Island. More than one expedition to note the changes and the agents that are active over a charming country. The expeditions was under the command Hovey, in connection with the St. Pierre Museum of Natural History. St. Pierre is the third time that he had since the disaster, and is a town of flourishing industry and a ket for the products of the town destroyed a hundred abandoned to decay. Most were left standing have no Grass and shrubs grow in between the ruins. Hopeless competence in presence of a rubbish are everywhere eye Victor Hugo, the principal pride of the town, has the ashes that blocked it, side streets rendered passable there a few buildings have able, and a modest hotel straggling who have been place by curiosity or necessity of a few trades business serve to emphasize of the destruction that overt St. Pierre will rise again—ashes—because it is necessary. The harbor is of impeded a solid wooden pier has near the lighthouse, which there is regular steamboat with Fort de France.

But there can be no doubt confidence is re-established inhabitants. The paralyzing linger still among them. Assured that no such over can again bring death and ately, accurate scientific crater of Mont Pelee excavation. Before the 8th of March eruption, Mont Pelee exhibited crater, about a kilometre deep, deepest part sank some 650 highest point of the surrounding wall, however, was not form height. On the south was broken by a V-shaped where the wall stood firm, the eruption took place the offered a very effective resister of lava and other ejected pelled the river of fire to least resistance through the southwest, where, unfortunately, Pierre. Not only was direct aperture to the issuing la also; and the stream was its career towards St. Pierre been the case had the crater. Now a new cone, composed rock, fills the old crater an feet above the highest part edge. There is no longer a wall to give direction to out and in the later storms, as the destructive ashes were sly in all directions or as direction of the wind. At St. Pierre such a rain of ashes mischief, and in the town property was endangered. eruption it may be confined that the distribution and damage will present the the August outbreak.

The internal energy of ever, effected such change summit that to the terrific unexpected is always possible strous needs of solid rock, spire could be seen standing its stature at the rate of some and men shuddered at this latent force. The growth uniform. Sometimes the up fall, but the damage was and in May, 1903, when the ed its greatest altitude, stood considerably higher than it, and for a while Mont reputation of being the high the Antilles. Apparently this colossal monument of labor had been bestowed, finished than Nature set to it. Destruction was the easy nacle, though built up by a and not formed of detached fissured and cracked through bear its own weight, a trestled from the summit, and the huge blocks of w posed lay scattered at the and in the valley beneath, such stores of force and the energy worked irreparable distracted inhabitants. Her examination proves reassur moths runs are the results of They tell of the throes of a

Another feature which el to delay the rebuilding. Pierre is the formation of the upper portion of the vo sist of fissures and holes itted seven years ago, from ued they cannot regarded, but from the high temper