

mother, as if fearing to lose her last young one, with beautiful courage sat so close that we could hardly get sight of it—once actually letting me come up within arm's length of her. This trouble had come upon her in a tree cactus where cactus wrens find safety for their broods, and which was certainly much better than a juniper to build in, but in her case perhaps the nest was too close to the ground.

Another nest—the one shown in the picture—was probably too low also, but it was one of the best protected from above that we saw during the season, for it was wedged down in a yucca among whose slender needle-like leaves were woven the thorny stems of a catsclaw. It contained three eggs, and in the sun we noted that they looked pinkish instead of "plain greenish or bluish white." While we were taking the liberty of photographing the nest, both parents made a circle of the bushes, anxiously inspecting us, but as soon as we had withdrawn, charming little creatures that they are, one of them quickly flew over to the catsclaw beside the yucca—its crown slightly raised, its white head stripes and black throat showing handsomely, while its black tail was twitching nervously—and after looking around alertly for a moment and seeing no danger, ran down a branch of the catsclaw to the nest. We could not wait to make sure of the end of the story but went away hopeful of good fortune for the winning pair that seemed to us to have made such a wise choice for their home.

*Washington, D. C.*

### About Collecting Chests

BY FRANK STEPHENS

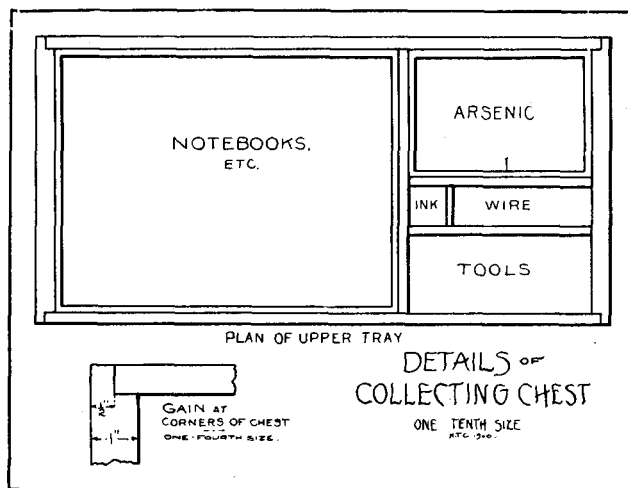
ONE of the earliest problems that the field collector encounters is that of making a convenient collecting chest. Having had a wide experience in that line during the last thirty years I may be able to give others some hints on this subject. It is not possible to make a chest that is just the thing for all classes of work and one must compromise to some extent.

A dozen years ago I found that I must have a new chest. I wanted one to carry in a wagon, and I expected to pack it occasionally over rough mountain trails, tho I have really packed it but little. I wanted to use it for drying and storing mammals as well as birds; I wanted to carry my tools and notebooks in it; and I wanted a table. I built a chest that has filled all these requirements fairly well and when I build a new one it will be on the same plan. Its principal fault is that it is rather small for general work and yet is rather large for packing on a horse. For a trip lasting more than two or three weeks provision must be made for storing skins elsewhere, but as the surplus skins will be nearly or quite dry a plain box answers all supplemental purposes.

For material I used sugar pine, selecting clear soft boards, took them to the mill and had them dressed to order. In building another chest I would use the same material, except for the front, back and bottom sides where I would prefer whitewood or poplar dressed to half an inch or a little thinner. The ends of the chest, the ends of the trays, and the lid are of inch material surfaced on both sides to about seven-eighths of an inch in thickness. The remainder of the lumber was split and surfaced on both sides, the split being a trifle one side of the middle, the thicker boards being used for the sides of the chest and the thinner ones for the bottoms of the trays.

The ends of the chest and of the trays have a gain notched in at their ends and bottom edges half their thickness and as deep as the thickness of the sides, so that the sides and bottoms can be nailed in the ends as well as thru from the sides. The trays have a hole an inch in diameter bored in the center to let the air pass as they drop in place. One can stick a finger thru the hole and lift out the tray, too, which is sometimes handy.

The outside dimensions of the chest are: Width, sixteen and a half inches; depth, including lid, fifteen and a quarter inches; length, thirty-two and a half. For wagon use alone I would prefer a length of three feet and a little greater depth. I have three full length trays in my chest. The upper tray is three and a half inches deep, the others being two and seven-eighths, the lower tray resting on cleats half an inch thick and three and three-quarters wide nailed to the ends. There is no need of a tray lying in the bottom. This bottom space I use for storing dry skins. If my chest was deeper I would make the outside depth of the two lower trays three inches and widen the cleats to fill the remainder. Give a full eighth of an inch play at side and back end of each tray. Cut a hand hole inside



the ends of the trays half an inch from the top to lift the trays out by, and a similar one on the ends of the chest outside two inches from the top; this is in addition to the usual chest handles. You will find ordinary chest handles inconvenient and likely to get broken. I got the style having staples riveted in to hold the handle. I hacksawed the handle in two and threw it away replacing it with a piece of half inch rope, which is pliable and doesn't get broken in the wagon.

I put a partition across my upper tray a little on one side of the middle. I put cleats one and a half inches wide at the ends of the longer division and made a shallow tray to fit there. In this I carry my note books, etc., and under it I put small skins. The other end I divided in the middle lengthwise, putting cleats at the end of the back half, and making a small tray to fit on these. In this small tray I pour my preservative and under it I keep various little odds and ends not in constant use, such as box of spare pens, spare shoe strings and a fish line and hooks. Those who use cornmeal in skinning would make another shallow tray for that. The front part I partitioned again. In the front compartment I keep my knives, pliers, scissors, etc., for daily use. I divided off a little space at the

inner end of the middle compartment for my bottle of carbon ink and use the remainder for spools of wire and thread.

If you figure out the depths of the trays you will find an inch of space in the depth of the chest unaccounted for. This is for my table. On the underside of a board as long and as wide as the inside of my chest and three-eighths of an inch thick I nailed a piece of half-inch lath at each end, clinching the nails. The legs of the table are also half-inch lath. They are hinged with small T-strap hinges. One pair of legs are set at the outer corners of one end and the pair at the other end are set in the width of a lath, so that they fold inside the others. A cross bar is nailed to each pair of legs just above the middle. To hold the legs in place I use the rib and brace of an old umbrella. I cut off one end of the rib an inch from the joint to act as a stop when opened out. Then I cut the other end and brace to a suitable length, heated them and flattened the ends and bent them over to make a joint. Thru these joints I passed small staples and drove them into the middle of the cross bars of the legs and into the middle of the table.

These seem slight braces but they have proved effectual. They should be made long enough to let the legs stand a little out of perpendicular. My table weighs three pounds complete. I use an umbrella rib stay for the lid of my chest also, the lower end hinging on a nail driven at the inside edge. The lid should hang back a trifle beyond the perpendicular and the stay will prevent an ordinary wind from blowing the lid down, as it would if held by a tape or cord.

Make the lid of your chest of inch stuff, as you will often want to use it as a seat. To remedy its tendency to split, plow a groove across each end three-eighths of an inch wide and an inch or more deep. Fit a tough piece of lath in this groove and glue or nail it in. This is not in the way as cleats are. Fasten the T-strap hinges and hasp with rivets instead of with screws and no one can open the chest with a pocketknife or screwdriver. You will need to countersink the screw holes to the T of your hinges on the other side, as this should be on the outside of the chest. Metal corners will add to the wear of your chest but are not indispensable. If you collect mammals you will find good soft sugar pine excellent for tray bottoms. Hard pine or redwood bottoms are exasperating material to stick pins into. Paint the outside of your chest thoroly. It pays. A hasp and padlock are better than a common lock.

*San Diego, California.*

### Birds Observed in the Krenitzin Islands, Alaska

BY RICHARD C. MCGREGOR

THE following is a list of the birds observed by me in the Krenitzin Islands, Alaska, while attached to the U. S. S. *Pathfinder* in the summer of 1901 (May 16 to September 20). Even with the best intentions nothing very remarkable could be done in the collecting line as my time was fully occupied with other work. I wish, however, that the reader could derive as much pleasure from this paper as I enjoyed in getting the material for it.

The Krenitzin Islands comprise that part of the Aleutian Chain lying between the two large islands of Unimak and Unalaska. The accompanying map (see page 118) is intended to show their size and positions. They have for the most part abrupt rocky shores but do not reach any great elevation. Where their surface is