123. **Ereunetes pusillus.** SEMIPALMATED SANDPIPER.—Saw fresh specimens at Mr. Aiken's, taken May 1.

124. **Symphemia semipalmata.** WILLET.—A few were taken by gunners near Colorado Springs May 1 to 10.

125. **Rhyacophilus solitarius.** SOLITARY TATTLER.—Fresh specimens were brought to Mr. Aiken May 1.

126. **Tringoides macularius.** SPOTTED SANDPIPER.—Not common. First seen about May 1.

127. **Bartramia longicauda.** BARTRAMIAN SANDPIPER. Large numbers were brought in by gunners April 28.

128. **Gallinula galeata.** FLORIDA GALLINULE.—Saw one in the flesh taken May 9.

129. **Anas boscas.** MALLARD.—Saw specimens taken May 9.

130. **Querquedula cyanoptera.** CINNAMON TEAL.—Saw specimens taken by gunners May 9.

131. **Spatula clypeata.** SHOVELLER.—Saw a few taken by gunners May 9. These three species of Ducks were quite numerous at a few favorable points during the early part of May.

132. **Larus delawarensis.** RING-BILLED GULL.—Rare. One was shot near town during the first week in May.

133. **Sterna forsteri.** FORSTER'S TERN.—Taken at rare intervals, according to Mr. Aiken.

134. **Podicipes auritus californicus.** AMERICAN EARED GREBE.—Saw a specimen in the flesh at Mr. Aiken's, killed May 1.

BIRDS OF THE LOWER URUGUAY.

BY WALTER B. BARROWS.

(*Continued from p. 143.*)

60. **Phylloscartes ventralis** (*Temm.*).—Among the low bushes bordering the streams this bird was noticed several times in July. Owing to its diminutive size and sober coloring it was probably often overlooked and may have been much more plenty than it seemed.

61. **Hapalocercus flaviventris** *Lafr. et d'Orb.*—Abundant in summer in wet marshes and among the rank grass and rushes about ponds and streams. Its rasping notes, energetic movements, and yellow underparts make it quite conspicuous, although one of the smallest species taken. It certainly breeds here, and doubtless also as far south as Carhué, many individuals being seen near that place in March, 1881, but I was unable to learn anything of its nesting habits.

62. **Serpophaga subcristata** (*Vieill.*). — This tiny Fly-catcher much resembles in general habits our own Least Fly-catcher (*Empidonax minimus*), but its motions and notes are much less energetic. It was noticed only in summer and always among trees or bushes. Nests were taken from October 14 until late in November. They were all similar in material and construction, being made of various cottony fibres, wool, and fine hair, and seated among thorny twigs, usually in a fork and at distances from the ground varying from three to fifteen feet. The eggs were commonly three, white, with a buffy tint, and unmarked.

63. **Serpophaga nigricans** (*Vieill.*). — During the cool weather—from April to September—this plain but pretty species was found among the rushes of every marsh and stream which was visited, both at Concepcion and further south. It seemed particularly fond of the rushes, and among these frequently half a dozen were in sight at once, spreading and flirting their tails and making short sallies for passing insects, always uttering their characteristic *chuck*, which was the only note heard.

Very few remain at Concepcion through summer, and those which do are found most often among the interlacing roots and half-fallen bushes along the river margins. The only nest which I found was a bulky structure composed largely of dark, fibrous moss mixed with grass and lined with finer material of the same kind. It was half swung, half seated on a leafless branch which drooped from the roof of one of those cobwebby, natural arbors formed by masses of vines striving to cover up and hide the bushes which they have killed. This nest, with its three white eggs and the parent bird, was secured at Concepcion, December 7, 1880. It was close to the undermined bank of the stream where it could only be seen from a boat passing close under the overhanging bushes.

64. **Cyanotis azaræ** (*Naum.*).—For a few days only during the spring migration (about September 1) at Concepcion the reeds, flags, and water-loving shrubs were fairly alive with these little gems. They were again met with in some numbers on the Pigué and at Carhué the last of March and first of April following. Of their summer home I know nothing. The older name, *Regulus omnicolor*, suggests much which is true of the bird. In color he combines black, white, lemon-yellow, olive-green, deep velvety blue and strongest ruby-red. In habit he reminds one forcibly of both Warbler and Kinglet, and, like the latter, he often hovers before the tip of a flag or reed to pick out some minute grub, or darts off to snap up with ease some passing gnat. In spring he has quite a sprightly little song, not very unlike that of our Redstart (*Setophaga ruticilla*).

65. **Elainea albiceps** (*Lafr. et d'Orb.*).—Three males were taken at Concepcion during the last half of August, 1880, and one or two others were observed, but it must be one of the least abundant Flycatchers at that point.

66. **Elainea modesta**.—The only specimen taken was a female which was shot from a nest at Concepcion November 30, 1880. The nest was a shallow affair built of twigs and roots, and placed on the horizontal branch of a straggling tree about five feet from the ground. It contained two eggs which were white, sparsely spotted with brown.

67. **Pitangus bellicosus** (*Vieill.*). BIEN-TE-VEO (I-SEE-YOU-WELL).—Almost the first bird which attracts a stranger's attention as he rides out into the country. The loud, unmusical cry salutes him from every grove or willow-clump and the bird himself is frequently seen directing his heavy, undulating flight from one tree to another. Grasshoppers and other clumsy insects are frequently taken on the wing, but quite as often the bird alights to pick them up from the ground. Most of the birds have nests as early as October 5, but they may be found with fresh eggs as late as the middle of December, and at all times between these dates. Doubtless two broods are often reared, but as the birds suffer much from the depredations of opossums and large lizards, many of the later nests are only second or third attempts to raise a family. The nest is a bulky and conspicuous object formed of a great variety of soft materials, among which grass and wool are always found. It is often more than a foot in diameter and

sometimes perfectly spherical, though oftener of a depressed globular form, and with a large hole in the side, which is rarely round or neatly finished. The site of the nest seems to be selected with some care and doubtless with some important end in view, though what it may be I cannot say, unless it have reference to the visits of the enemies above alluded to. At all events a very large proportion of the nests are placed on trees or bushes which either extend directly out over water or else overhang some bank, bluff, or abrupt depression so that it is often difficult for a person to examine the nest even when it is not twenty feet in a direct line from the root of the tree. Out of at least twenty-five nests examined, about two thirds overhung the water and were reached by standing up in a boat and drawing down the branch or branches which held them. Of the remainder, only two or three were built on trees which stood on level ground.

The eggs are usually five in number, sometimes but four, and often only three, in nests found in November or December. In color they vary from pearly-white to buffy-white, dashed more or less thickly with spots of brown or black. We did not meet with this bird at Azul or further south, and I believe it is never found far from water, or in regions where timber is very scarce.

68. **Myiodynastes solitarius** (*Vieill.*).—The first specimen of this fine Flycatcher which I saw was brought to me by a boy who killed it with a rubber "sling" among the Paradise trees in the Plaza at Concepcion. This was on November 26, and only two more specimens were secured in the next month's collecting, though several others were observed. They kept mostly among the large trees along the river banks where they may perhaps breed, though their proper home is further up the river in Paraguay and Brazil.

69. **Myiobius nævius** (*Bodd.*).—A rather scarce spring migrant occurring singly or in pairs during September and October. It was usually found among thorny bushes in comparatively open and wet ground.

70. **Pyrocephalus rubineus** (*Bodd.*). BRASA DE FUEGO (COAL OF FIRE) and CHURRINCHE. (This latter name is also applied to any of the other small Flycatchers, but I could not find out what it signified.)—The Vermilion Flycatcher is an abundant summer resident at Concepcion, arriving about the

middle of September and leaving soon after the first of April.

The nest is built the last of November or first of December. It is usually made of twigs, grass, etc., and there is almost always some attempt at concealment, made by the addition of bits of bark and moss to the outside. One found December 1, 1879, was built on the horizontal stalk of a half dead cactus (*Opuntia*) which stood in an open, sandy field at a distance from any trees. It was remarkably shallow and the two eggs which it contained were exact miniatures of heavily spotted eggs of the Common Tern (*Sterna hirundo*). Other nests, though better sheltered than this one, were always in comparatively exposed situations, on the horizontal limbs of trees and seldom more than four or five feet from the ground, yet they were not easy to find, even after the parents had shown by their anxiety that they could not be many yards away. I never started the male from the eggs, but always the female.

71. **Myiarchus tyrannulus** (*Müll.*).—First seen November 20, 1880; afterwards occasionally and in pairs until the first week in January, 1881, when I left Concepcion. On December 28, I found a loose nest of hair, feathers, etc., in a hollow stub five feet from the ground. It contained three eggs which in color and markings were precisely like those of *M. crinitus*, but a little smaller.

72. **Tyrannus melancholicus** *Vieill.*—This wanderer is not an uncommon summer resident at Concepcion where I found a straggling party of a dozen or more November 1, 1879. December 20, 1880, a nest with three eggs was taken from a slender bush which stretched out over one of the narrow river channels between the islands. The nest was compactly built of twigs, grass, and roots, and would easily have passed for an average nest of the Kingbird (*Tyrannus carolinensis*). The eggs were white, sparsely splashed with several shades of brown.

73. **Tyrannus aurantio-atro-cristatus** *Lafr. et d'Orb.*—A not very abundant summer resident, but one not easily overlooked, owing to its habit of perching on the topmost twig of any tree on which it alights, making forays from time to time when tempted by its winged prey. A nest found December 28, was a rather careless structure of twigs and roots placed among the thickest branchlets of a mimosa at a height of about eight feet. It contained two eggs (besides one of the Cowbird),

which were very similar to those of *Milvulus tyrannus*, but rather smaller.

74. **Milvulus tyrannus** (*Linn*). TIJERITA (LITTLE SCISSORS, in allusion to the tail).—By far the most abundant Flycatcher which breeds at Concepcion. Arriving early in October, it breeds during November and December, and leaves for the north again before April 1. It was met with at Azul on January 31, 1881, and a single one was seen at Bahia Blanca February 9.

75. **Pachyrhamphus**, *sp. incog.*—Three males of a beautiful species probably belonging to this genus were taken at Concepcion during November, 1880. They were shy and silent, moving leisurely from one low tree to another along the borders of the streams.

76. **Phytotoma rutila** *Vieill.*—An abundant bird among shrubbery everywhere, especially in winter. Gravelly localities where the mimosas and other thorny shrubs alternate with the melon and prickly-pear cactuses and where there are occasional patches of brambles and creeping vines overrunning all, are favorite resorts. Here the brick-red breast of the male is a rather conspicuous object as he sits on the top of some low bush uttering from time to time that characteristic note which has been well likened by Hudson to the bleat of a new-born lamb. The nest, which may be found late in September or early in October, is quite frail and is commonly well hidden in the green interior of a prickly bush, or a mass of twining vines. It is built mostly of fine twigs and finer rootlets and in it the bird deposits usually three bluish-green eggs with brownish flecks. The birds feed largely on green leaves of various kinds with perhaps some berries and a few insects.

77. **Geositta cunicularia** (*Vieill.*).—Hardly more than a winter visitor at Concepcion, though a pair seen October 26 appeared to have eggs or young. In winter, however, it is very abundant and may be seen running about singly or in pairs on dry, grassy or gravelly places. It is strictly terrestrial and when running about singly it may be driven before one like a chicken. It has a rolling call similar to that of the Downy Woodpecker (*Picus pubescens*) but weaker, and a nervous way of flirting its wings and raising and dropping the tail which is common to many other birds of this group. It was abundant at Bahia

Blanca where it was occasionally seen running over the roofs of the houses. Of its breeding habits I know nothing, but most of the birds undoubtedly breed further south.

78. **Furnarius rufus** (*Gm.*). HORNERO (OVEN-BUILDER).—This bird has been so often and so thoroughly described that I do not feel like saying much about it. Its familiarity with man, its curiosity, its piercing notes and its strange, dome-shaped mud nest are all well known. At Concepcion it is one of the commonest residents and its nest may be seen in almost any street.

The nest is built of such mud as can be found near at hand, and if the mud contain grass-roots or similar fibres so much the better, but I do not think the birds worry themselves much about the quality of the materials. Although the eggs may not be laid until September or October, the birds often begin work on the nest as early as the middle of June, thus occupying three months or more in its completion. In fact I doubt if there is any month in the year when one cannot find Oven-birds at work on their nests. If the weather is dry they suspend work for a week or two until a shower refills the muddy pool from which they draw their building material, when they go on leisurely as before. This is the case only in winter, and when there is nothing to cause haste. In spring and summer the case is entirely otherwise; a nest may then be begun and finished within a week. But a winter-built house is usually much the best, and not a few such withstand the rain and heat for a year or more if not sooner pulled down by boys, iguanas, or birds of prey. The clayey mud bakes almost to brick and it is no easy matter even to break out a hole large enough to extract the eggs. The nests are rather less than a foot in greatest diameter, and though the eggs are not visible from the entrance the common statement that there is an "ante-chamber" to the nest seems to me not quite accurate. The nest is built very much like a spiral shell, and if one could remove the inner whorls from such a shell as *Ampularia* he would have quite a fair miniature of the Hornero's nest. The eggs are seldom more than three in number, and are originally pure white, but being laid directly on the muddy floor of the nest they soon acquire about the same color. I have taken them from September 16 until January 15, but the larger number are, I think, laid during October.

79. **Upucerthia dumetoria** *Geoffr. et d'Orb.*—A few of these were met with on the crest of a little hill about three miles from the desolate little Indian village of Puan. In general habits they seemed to resemble *Geositta* more closely than any other bird, but were more frequently on the wing, besides differing totally in size and aspect from that bird.

At Carhué a few more were seen on April 6; but they were very shy and nothing was added to our knowledge of them there.

80. **Cinclodes fuscus** (*Vieill.*).—An abundant bird at Concepcion through the cold weather, frequenting sandy or muddy flats and avoiding bushy or grassy ground. In general appearance they remind one not a little of our smaller Thrushes (*T. fuscescens*, *pallasi*, etc.), but of course the resemblance is only superficial. They were often seen in scattered flocks of several hundred, or, to speak more correctly, several hundred were seen at the same time on a flat only eight or ten acres in extent, and after one or two had been shot the rest disappeared together, but not all in the same direction or in any order which could be called a flock.

They were rather abundant at Puan and Carhué from March 28 to April 8, but all seemed to be migrating. I know nothing of their breeding habits.

The next twelve species, belonging to the Synallaxine group, are chiefly interesting on account of the remarkable nests which they build. As a rule they are plain, inconspicuous, harsh-voiced little birds, resembling Wrens and Nuthatches in their movements, but with the stick-collecting propensity of the Wren developed to such a remarkable extent that were it not for the practical uses to which it is put we should say it was simply absurd.

These birds are very abundant at Concepcion, their nests being one of the most noticeable features of the landscape. There are places within two miles of the centre of the town where I have stood and counted, from one point within a radius of twenty rods, over two hundred of these curious nests, varying in size from that of a small pumpkin to more than the volume of a barrel. Often a single tree will contain half a dozen nests or more, and not unfrequently the nests of several different species are seen crowd-

ing each other out of shape on the same bush or tree. Most of the smaller species are so similar in color and motion that they cannot possibly be distinguished from each other at a distance of twenty feet. And it can easily be imagined how difficult it is to collect eggs and be *sure* of their identification. The eggs of most species are as much alike as the parents themselves,—often more so, for the eggs are always either white or pale blue, and unmarked; while there is really considerable difference in color and pattern among the birds. The few notes which I have brought together here may seem very scanty as the outcome of work among such wealth of material, but such as they are I offer them with some confidence in their accuracy, for the reason that they *are* few, and that they were not hastily taken.

81. **Phlœocryptes melanops** (*Vieill.*).—We first met with this species near Bahia Blanca in February, 1881. It was here restricted to the rushes bordering the stream, and in suitable localities was quite abundant, but its habit of skulking close along the bank under the cover of the thickest grass and rushes made it a difficult bird to secure. We afterward found it to be abundant along every stream on the pampas which we visited. Bulky, spherical nests, eight or ten inches in diameter and composed of rushes, grass, and mud, were several times found swung amongst the reeds overhanging the water, and doubtless they belonged to these birds, but as it was then late autumn tney were all empty and more or less dilapidated.

82. **Leptasthenura ægithaloides** (*Kittl.*). ESPINERO CHIQUITO (TINY THORN-BIRD).—The smallest species of the family, and readily distinguished also by its elongated central tail-feathers and its crest. It has most of the habits of the Titmice, frequently hanging head downward or clinging against the bark of a tree while hammering its bill into the crevices. I do not remember ever to have seen one on the ground. It was quite common about Concepcion, both in summer and winter. A nest found November 6 was built among the thorny twigs of a low mimosa at a height of about five feet from the ground. It was composed of thorny and other twigs with a few tufts of wool, but without any proper lining. In shape it was a short cylinder, about ten inches high by six in diameter; the entrance a small hole at the top, the nest a spherical cavity at the bottom, the two connected by a spiral passageway less than an inch in diameter, which made only

about one complete turn. It contained two tiny white eggs, which were perfectly fresh. Probably more would have been deposited, as most of the other species lay at least three or four.

83. **Synallaxis albescens** (*Temm.*).—An abundant species in thorny hedges or among the masses of dwarfed and spiny bushes which cling to each other so tenaciously amid the general desolation of the sandy barrens. Its note is almost precisely like the common call note of the Pewee (*Sayiornis fuscus*).

The nest varies in shape and detail of construction according to the surroundings. It is commonly placed among the thickest meshes of a thorny thicket, and its body is of the shape of an egg placed with its longer axis vertical and the larger end downward. This is a shell made by weaving and locking together twigs and thorns of various kinds, and is usually completed by the massing of a quantity of decaying twigs of larger size on top—presumably to keep the whole dry. This body of the nest is from eight to twelve inches in height, and the eggs are laid either on the bare twigs at the bottom of the cavity, or more rarely on a loose flooring of wool. Entrance is gained by the bird through a long tube which is built on to the nest at a point about half way up the side. This tube is formed by the interlocking of thorny twigs, and is supported by the branches and twigs about it. It may be straight or curved; its diameter externally varies from two to four inches, and its length from one to two feet. The passageway itself is but just large enough to admit the birds one at a time—and it has always been a mystery to me how a bird the size of a Chipping Sparrow could find its way through one of these slender tubes, bristling with thorns, and along which I found it difficult to pass a smooth slender twig for more than five or six inches. Yet they not only pass in and out easily, but so easily that I was never yet able to surprise one in the nest or to see the slightest disturbance of it by the bird's hurried exit.

The eggs are three or four, light blue, and may be found from October until late in December.

84. **Synallaxis phryganophila** *Vieill.*—Larger than the preceding and less abundant, but found in similar places. The long middle tail feathers, and the black and yellow chin and throat markings distinguish it easily among all its relatives. A nest containing four white eggs, faintly tinted with blue, was found January 26, 1880, in a thorny tree, and some eight feet from the

ground. The nest was quite similar to the one just described, but the cavity in which the eggs were laid was near the *top* of the body of the nest, while the passageway descended from it to the base of the nest, and there becoming external rose gradually to the level of the eggs at a distance of almost three feet.

These two are the only species building these "nests with handles" with which I am acquainted.

85. **Synallaxis striaticeps** *Lafr. et d'Orb.*—Never very abundant, but not uncommon in winter among the thicker trees near the river. It creeps more than the other *Synallaxes*, and in form, color and habits is strikingly like *Lepidocolaptes atripes*—in fact a very good imitation on a small scale. Of nest and eggs I know nothing.

86. **Synallaxis sordida** *Less.* ESPINERO CHICO (LITTLE THORN-BIRD).—One of the commonest species, and found everywhere in low woods or among bushes and cactus plants. The nest, which often contains a peck or more of thorns and twigs, is placed on a bush or low tree, not unfrequently among the bristling stems of the prickly-pear cactus. Its plan is the same as that described under No. 82, but the spiral way leading to the nest cavity is much longer and frequently makes more than one complete turn. The three or four white eggs are laid sometimes as early as October 1, and also as late as December 25. This bird uses rather more wool and other soft substances in its nest-building than any of the species yet described.

87. **Synallaxis sulphurifera** *Burm.*—A single specimen was taken among high grass and sedges on the edge of a bushy swamp at Concepcion, October 2, 1880. Of its habits I know nothing.

88. **Synallaxis maluroides** *d'Orb.*—Found sparingly at Concepcion among reeds and sedges, especially where these grow in water one or two feet deep. Here its harsh, cackling notes frequently seem quite close to you while the utmost patience may not be repaid by a single glimpse of their author. In precisely these localities, and nowhere else, may be found nearly globular nests six or seven inches in diameter formed of grass, reeds, etc., mixed with some mud, but with little in the way of lining. They are bound to the reeds, and each contains early in October three or four clear, pale-blue, unspotted eggs. Although I never saw a bird of any kind enter or leave one of these nests I collected

sufficient circumstantial evidence to implicate the present species in their construction.

89. **Synallaxis hudsoni** *Scl.*—A strictly terrestrial species which does not occur at all at Concepcion. We first saw it at Azul late in January, 1881. The first individuals seen were flushed from the long, dry grass which grew along the bank of the stream at that place. They rose very much like Pipits, for which I at first mistook them, although their note is quite different. We soon found that they were not confined to the long grass near the stream but were equally plenty in the short grass of the pampas. They were afterward met with in all suitable localities on the pampas, and even on the *meseta* of the Sierra de la Ventana at a hight of some 2000 feet above the surrounding plain. I know nothing of the nest, but as the birds are only found on the treeless plains we should expect the nest to resemble somewhat that of the species just described.

90. **Placellodomus sibilatrix** *Döring.*—An abundant species among the open woods along the Uruguay and hardly distinguishable at ten paces distance from half a dozen others. Its nest, however, is unmistakable. The birds begin by fixing a few crooked and thorny twigs among the terminal sprays of some slender branch which juts out horizontally from a tree, or rises obliquely from near its base, and around these twigs as a nucleus more are gathered, until by the time the nest has reached the proper size its weight has bent the branch so that its tip points directly to the earth. Nests which are thus begun at a distance of fifteen or twenty feet from the ground are often only two or three feet from it when finished, and a thorough soaking by a heavy rain will sometimes weigh them down until they actually touch. They are more or less oval or cylindrical in shape and commonly about two feet long by twelve or fifteen inches in diameter, and contain from a peck to a bushel of twigs and thorns. The nest cavity within is small in proportion to the size of the nest, and occupies its upper part. It is reached by a more or less direct passageway from below, the external opening being very nearly at the lowest part of the nest, though sometimes a little shelf, or even a pocket, is built on to the side, forming a resting place in front of the door.

The nests vary interminably in size and shape, but are pretty constant in the material used—this being almost always irregular

and thorny twigs of various trees growing in the neighborhood, while the interior is formed of less thorny twigs with some wool and hair. Usually, also, if the material be at hand, a quantity of old, dry horse-droppings is placed loosely on top of the nest and gradually becomes felted into it, rendering it more nearly waterproof. In place of this I have frequently found quantities of broken straw, weed-stalks, twigs, grass, and even chips; all doubtless collected from the ridges of drift which the last overflow of the river had left near at hand. So compactly is the whole nest built that it often lasts more than one year, and may sometimes serve the same pair two successive summers. More often, however, a new nest is built directly above the old one, which serves as a foundation, and occasionally as many as three nests may be seen thus on the same branch-tip, two of them at least being occupied. When other branches of the same tree are similarly loaded, and other trees close at hand also bear the same kind of fruit, the result is very picturesque, yet it is so common that it soon ceases to attract attention, and even among the natives the bird has no distinctive name, being called *Espinero chico* (Little Thorn-bird) or *Caserito* (Little House-builder), names applied indiscriminately to half-a-dozen species.

The eggs, which are white, are laid from October 1 to January 1, but many of the birds work at nest-building all winter, sometimes spending months on a single nest.

91. **Placellodomus ruber** (*Vieill.*)—Nearly twice the size of the preceding, which it much resembles in habits and note. The nest is also quite similar, though never pendent in the same degree. Indeed, it is sometimes built into the main fork of a small tree; but this is unusual. It is commonly placed either *in* a clump of bushes, or else on a branch in the same way as with the preceding species, except that the nest does not *nod* so far, the branch rarely bending below the horizontal. The nest is of about the same size and shape, but is thus placed with its longer axis horizontal instead of vertical, and with the entrance at the end as in the other case. There are commonly two cavities in the nest, one being half open to the weather, and forming the entrance, the other further back and connected with the former by only a short passageway, which in many cases is reduced to a simple hole through a broad partition which alone separates them. The nest cavity is thus about on the same level as the entrance,

but the eggs are never visible on looking in at the orifice. The birds nest at about the same time as the preceding, and the eggs are similar but larger.

92. **Anumbius acuticaudatus** *Less.* ESPINERO (THORN-BIRD).—This well-known bird abounds at Concepcion, as it does almost everywhere in the Argentine Republic, where there are trees or bushes large enough to support its nest. The bird is not larger than our Wood Thrush (*Turdus mustelinus*), but its nest is sometimes four feet in length, with an average diameter of two feet. Probably no nest as first completed would show these dimensions, but as the same nest is used for several seasons in succession its size increases until it may even exceed the above measurements. The bird is rather partial to thinly-wooded districts, and spends more of its time on the ground than do the two preceding species. Like them it builds its nest of twigs and thorns, placing it either on a tree or bush, sometimes low enough to be reached by the hand, sometimes at a height of twenty or thirty feet. The first new nest I ever examined was built in an ombú tree at Buenos Aires and measured about two and one-half feet in height by fifteen inches in diameter.

The longer diameter was vertical and the opening at the top gave access to a passageway, barely large enough to admit the hand, and twisting regularly in a spiral to near the bottom where it enlarged somewhat to form the nest cavity. The spiral passageway made rather more than two complete turns between orifice and nest, and in so doing passed between two branches of the tree so close together as barely to allow the passage of the bird. I have several times seen nests in which these passageways were made to pass completely around the (small) main stems of the trees on which they were built. In other nests the passageway, though never straight, was by no means a spiral, and the longer axis of the nest frequently becomes only slightly raised above the horizontal. Sometimes several nests are joined together and all occupied at the same time, but more often a new nest is to be seen built against an old one, and in the latter a Swallow or other bird will have built its own nest.

Sometimes the four or five white eggs are laid on the bare, clean twigs of the nest; sometimes the whole interior—passage and nest cavity—is well lined with wool and other soft substances. The birds suffer much from both opossums and iguanas, the for-

mer entering by the door, the latter pulling the bottom of the nest out and reaching eggs or young from below. The birds are by no means shy, and when a nest is conveniently situated it is quite easy to catch the bird in the nest after sunset. Fresh eggs may be found from October till January—and the birds spend more or less time in building and repairing nests throughout the entire year.

93. **Homorus lophotus** (*Bon.*). COPETON (BIG-CREST) and CASERO (HOUSE-BUILDER).—The name *Cachalote* assigned by most writers to this bird I have never heard at Concepcion where it is well known by the name *Copeton*. A bird the size of a Blue-jay, with uniform rufous plumage, a respectable crest, an outrageous disposition and voice, and a nest the size of a barrel, is a bird that cannot be overlooked, especially if, as is his custom, he comes attended by a score or so of his immediate relatives and friends.

Like many a more pretentious creature, however, his house is more interesting than himself, and we have only room for a brief glance. His nest is built entirely of sticks, and many of them of goodly size, frequently as large around as your little finger and two feet or more long. These are disposed in such a way as to form a structure three or four feet in length by about two in breadth at the widest part, the whole very much resembling a gigantic powder-flask lying on its side among the lower branches of a spreading tree. It is quite loosely built and the nest cavity is rather indefinite, being any portion of the floor of the nest which the bird selects for the reception of the eggs. These are usually three or four in number, pure white, and are laid from October until January. They can usually be counted through the loose floor of the nest, though sometimes its thickness prevents this. The birds stick closely to the thickest and thorniest trees, and I do not remember ever to have seen one on the ground. Their voices are harsh and discordant in the extreme, and except for their large and curious nests the birds would have little interest even for the collector.

(*To be continued.*)