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*** START OF THE PROJECT GUTENBERG EBOOK NOTES ON PHILIPPINE BIRDS COLLECTED BY GOVERNOR W. CAMERON FORBES ***

Bulletin of the Museum of Comparative Zoölogy
AT HARVARD COLLEGE.
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NOTES ON PHILIPPINE BIRDS COLLECTED BY
GOVERNOR W. CAMERON FORBES.

BY OUTRAM BANGS.

CAMBRIDGE, MASS., U. S. A.:
PRINTED FOR THE MUSEUM.
APRIL, 1922.

REPORTS ON THE SCIENTIFIC RESULTS OF THE EXPEDITION TO THE EASTERN TROPICAL PACIFIC, IN CHARGE OF ALEXANDER AGASSIZ, BY THE U. S. FISH COMMISSION STEAMER "ALBATROSS," FROM OCTOBER, 1904, TO MARCH, 1905, LIEUTENANT COMMANDER L. M. GARRET, U. S. N., COMMANDING, PUBLISHED OR IN PREPARATION:—

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- [1] Bull. M. C. Z., Vol. XLVI., No. 4, April, 1905, 22 pp.
[2] Bull. M. C. Z., Vol. XLVI., No. 6, July, 1905, 4 pp., 1 pl.
[3] Bull. M. C. Z., Vol. XLVI., No. 9, September, 1905, 5 pp., 1 pl.
[4] Bull. M. C. Z., Vol. XLVI., No. 13, January, 1906, 22 pp., 3 pls.
[5] Mem. M. C. Z., Vol. XXXIII., January, 1906, 90 pp., 96 pls.
[6] Bull. M. C. Z., Vol. L., No. 3, August, 1906, 14 pp., 10 pls.
[7] Bull. M. C. Z., Vol. L., No. 4, November, 1906, 26 pp., 4 pls.
[8] Mem. M. C. Z., Vol. XXXV., No. 1, February, 1907, 20 pp., 15 pls.
[9] Bull. M. C. Z., Vol. L., No. 6, February, 1907, 48 pp., 18 pls.
[10] Mem. M. C. Z., Vol. XXXV., No. 2, August, 1907, 56 pp., 9 pls.
[11] Bull. M. C. Z., Vol. LI., No. 6, November, 1907, 22 pp., 1 pl.
[12] Bull. M. C. Z., Vol. LII., No. 1, June, 1908, 14 pp., 1 pl.
[13] Bull. M. C. Z., Vol. LII., No. 2, July, 1908, 8 pp., 5 pls.
[14] Bull. M. C. Z., Vol. XLIII., No. 6, October, 1908, 285 pp., 22 pls.
[15] Bull. M. C. Z., Vol. LII., No. 5, October, 1908, 11 pp., 2 pls.
[16] Mem. M. C. Z., Vol. XXXVII., February, 1909, 243 pp., 48 pls.
[17] Mem. M. C. Z., Vol. XXXVIII., No. 1, June, 1909, 172 pp., 5 pls., 3 maps.
[18] Bull. M. C. Z., Vol. LII., No. 9, June, 1909, 26 pp., 8 pls.
[19] Bull. M. C. Z., Vol. LII., No. 11, August, 1909, 10 pp., 3 pls.
[20] Bull. M. C. Z., Vol. LII., No. 13, September, 1909, 48 pp., 4 pls.
[21] Mem. M. C. Z., Vol. XLI., August, September, 1910, 323 pp., 56 pls.
[22] Bull. M. C. Z., Vol. LIV., No. 7, August, 1911, 38 pp.
[23] Mem. M. C. Z., Vol. XXXVIII., No. 2, December, 1911, 232 pp., 32 pls.
[24] Bull. M. C. Z., Vol. LIV., No. 10, February, 1912, 16 pp., 2 pls.
[25] Mem. M. C. Z., Vol. XXXV., No. 3, April, 1912, 98 pp., 8 pls.
[26] Bull. M. C. Z., Vol. LIV., No. 12, April, 1912, 38 pp., 2 pls.
[27] Mem. M. C. Z., Vol. XXXV., No. 4, July, 1912, 124 pp., 12 pls.
[28] Bull. M. C. Z., Vol. LVIII., No. 8, August, 1914, 14 pp.
[29] Mem. M. C. Z., Vol. XLII., June, 1915, 397 pp., 109 pls.
[30] Bull. M. C. Z., Vol. LXI., October, 1917, 28 pp., 5 pls.
[31] Mem. M. C. Z., Vol. XLVIII., July, 1919, 514 pp., 80 pls.
[32] Mem. M. C. Z., Vol. XXXIX, No. 3, February, 1920, 46 pp., 6 pls.
[33] Mem. M. C. Z., Vol. XXXIX, No. 4, September, 1920, 40 pp., 4 pls.

NOTES ON PHILIPPINE BIRDS COLLECTED BY

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No. 4.—*Notes on Philippine Birds collected by Governor W. Cameron Forbes.*

BY OUTRAM BANGS.

In the last decade former Governor-General W. Cameron Forbes has presented to the Museum of Comparative Zoölogy three large collections of Philippine birds. One of these was made in 1911, another in 1913, and the third and finest collection in 1921 while, with General Leonard Wood and Colonel Gordon Johnston, Mr. Forbes was on an official tour of inspection of the islands.

On the excursions which resulted in the gathering together of these collections Mr. Forbes was sometimes accompanied by General Leonard Wood, the Honourable Dean C. Worcester, and Dr. Richard C. McGregor, and he had also the expert assistance of Mr. A. Celestino.

During the spring and summer of 1921 Governor Forbes and party visited most of the islands of the group. Bird collecting was carried on with enthusiasm by all the members of the party on every possible occasion, but stops at the different islands were at best limited to a few days and official business had, of course, precedence. The collections therefore while large, interesting, and fairly representative are by no means exhaustive.

The following notes, which include descriptions of five new forms, are based on the three collections.

I am under great obligations to Dr. Chas. W. Richmond and Mr. J. H. Riley of the United States National Museum for making some comparisons in Washington and for giving me data from other specimens in the collections under their care.

IREDIPARRA GALLINACEA GALLINACEA (Temminck).

Twelve specimens, both sexes, mostly fully adult, Lake Liguasan, Mindanao, March and August.

The Comb-crested Jacana has been found in the Philippine Islands, apparently only in Mindanao. Specimens from that island I am unable in any way to distinguish from one skin in the M. C. Z. from Celebes, the type-locality of the species. Mr. J. H. Riley writes me that he has lately compared three specimens from Celebes with one from Mindanao with the result that he could find no differences. It is safe therefore to refer the Philippine bird to the typical form.

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PLEGADIS FALCINELLUS PEREGRINUS Bonaparte.

Three specimens, two males and a female, from Mindanao, March and August.

These belong, as of course was to be expected, to the decidedly small form of Australia, Java, Celebes, etc., the range of which must be extended to include the Philippines as well.

MEASUREMENTS.

NO.	SEX	WING	TAIL	TARSUS	CULMEN
57,552	♂	262	96	104	127
86,480	♂	258	98	100	131
86,481	♀	250	98	84	105

SULA DACTYLATRA PERSONATA Gould.

Five adults, both sexes, Tubbatuba Reef, Sulu Sea, August, 1913.

The Blue-faced Booby, which breeds in the Tubbatuba Reef in the Sulu Sea is indistinguishable, so far as I can see, from the Australian form.

The color of the bill and feet was not noted on the labels of Gov. Forbes's birds; in the dry specimens the bill is pale yellow and the feet are dull greenish black.

MEASUREMENTS.

NO.	SEX	WING	TAIL	TARSUS	CULMEN AT WIDTH OF	
					BASE	CULMEN
64,611	♂ ad.	418	190	59	101	30
64,614	♂ ad.	398	190	59	99	30
64,616	♂ ad.	405	184	57	100	28
64,612	♀ ad.	420	183	61	102	29
64,613	♀ ad.	424	185	59	103	28

FREGATA MINOR MINOR (Gmelin).

Six specimens, two adult males in full breeding plumage, three adult females and one immature male, from Cavilli and Bancoran Islands, Sulu Sea, March and September.

I follow Rothschild in restricting Gmelin's name *minor* to the bird of the eastern Indian Ocean, north Australia etc. (= *F. minor listeri* Mathews), and with little doubt refer to this form the Philippine Frigate. [Pg lxxix]

The color of the bill in the three females is *bright pink*, not far from between France-pink and geranium-pink of Ridgway. The soft parts were described by Governor Forbes on the labels as—"Eyelid bright red: bill light pink, nail white, tip black; feet pale pink." The males all have dark bills, their soft parts were noted on the labels as—"Bill blue-black; feet dull brownish, with a slight reddish tinge."

An adult female of *F. minor palmerstoni* (Gmelin), shot by Flood, 29 September, 1895 at Molokai, H. I. (115,028 M. C. Z.) has a decidedly pinkish bill, the color of which was noted on the label as "light purple."

Gmelin mentions the red bill in his short diagnosis of *minor* and Edwards's plate to which he refers shows a female Frigate with a red bill.

I have dwelt at the above length upon the red bill of the female of both *minor* and *palmerstoni* because it is a character that I have seen but little mentioned, and because I feel morally certain that the American bird—*Fregata magnificans* Mathews according to Rothschild, *F. minor rothschildi* Mathews according to Mathews—does not show it. We have a very large series of Frigate birds from America, and among the females none show any trace of reddish or pinkish on the bills, nor do I find the bill of the female described as pink on any label, or for that matter in any text-book.

This being the case, it is a matter of much interest to know what forms have a pink bill in the female, and what do not.

FREGATA ARIEL ARIEL Gray.

Three specimens, from Tawi Tawi Island, two adult males and one adult female all taken 21 August, 1921.

Compared with *Fregata ariel iredalei* Mathews of the western Indian Ocean these are large birds with heavy bills, and appear wholly referable to true *ariel* of Australia etc.

MEASUREMENTS.

No.	SEX	WING	CULMEN TO FEATHERS
86,492	♂ ad.	501	87
86,493	♂ ad.	491	89
86,491	♀ ad.	552	92

BUTEO JAPONICUS (Temminck & Schlegel).

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One immature example (sex not determined) was shot by Mrs. Robb White at Sagada, Bontoc, northern Luzon in July 1913 and given to Governor Forbes. This, I believe, is the first record for the species in the Philippines. The specimen, M. C. Z. 64,621, affords a wing length of 366 mm.

XANTHOLAEMA HAEMACEPHALA HAEMACEPHALA (Müller).

Two adult males, Mindoro, July. (Also two old skins in M. C. Z. labeled "Manilla").

Stuart Baker, (Ibis 1919, p. 219), has already pointed out the strong characters that distinguish the Philippine form of this little Barbet. I include it in these notes merely to emphasize the fact that it must be kept distinct from birds from India, the Malay Peninsula, Sumatra, etc. Its long bill, dark colors, and heavily striped under parts at once distinguish it.

XANTHOLAEMA ROSEA INTERMEDIA Shelly.

Four adults, both sexes, Negros, July.

This is another strongly marked representative form, peculiar to the Philippines. It differs from *X. rosea rosea* (Dumont) of Java etc. in its very much larger bill (averaging 22 mm. as against 16 mm. in true *rosea*), slightly larger size, darker colors, and much more heavily striped under parts.

LALAGE NIGER MITIFICA, subsp. nov.

Twelve specimens, both sexes, Lubang near Luzon, Mindanao, Palawan, Camiguin, Camotes, Basilan, Panay, Mindoro, and Cagayan de Sulu, June, July, and August.

TYPE.—M. C. Z. 64,329 adult ♂, Lubang, near Luzon, 6 July, 1913. W. Cameron Forbes.

CHARACTERS.—Similar to *L. niger niger* (Forster), (type-locality "in India Orientali" which I will farther restrict to Singapore, being as likely as anywhere else to have been whence the type actually came), but larger; in color the adult ♂ differing in the sheen of the head and back being darker and more purplish, less greenish; the rump slightly darker gray and the tibia grayer, less whitish. The adult ♀ decidedly grayer less brownish above—deep neutral gray (the upper parts in *L. nigra nigra* are hair-brown to Chaetura drab).

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REMARKS.—Birds from Java are small and appear to be quite like those from Singapore and the southern Malay peninsula. The Borneo bird is a little larger and the one female before me is gray above as in the Philippine form.

MEASUREMENTS.

Lalage niger mitifica Bangs.

No.	SEX	LOCALITY	WING	TAIL	TARSUS	CULMEN FROM BASE
86,669	♂	Panay	93	69	20	18
86,668	♂	Basilan	94	70	20.5	17.5

86,671 ♂	Camotes	93	70	21	18
86,667 ♂	Camiguin	95	73	20	19
57,520 ♂	Cagayan de Sulu	92	69	20	19
64,329 ♂	Lubang	92	71	20.5	19
64,330 ♂	"	93	70	20	18.5
64,331 ♂	Palawan	95	69	20	17.5
64,328 ♀	Lubang	93	—	21	18.5
64,327 ♀	Mindanao	92	72	21	19

Lalage niger niger (Forster).

No.	SEX	LOCALITY	WING	TAIL	TARSUS	CULMEN FROM BASE
33,994 ♂		Singapore	85	68	19	16
34,119 ♀		Kelang	82	63	19	17
60,164 ♂		Java	87.5	66	20	17
60,163 ♂		"	88	70	20	16
60,166 ♂		"	85	68	21	16
60,160 ♀		"	87.5	67	19	18
60,159 ♀		"	86	69	20	16
60,167 ♀		"	83	64	20	17
12,182 ♀		"	87	61	19	—

AEGITHINA TIPHIA AEQUANIMIS, subsp. nov.

Nine specimens, both sexes, from Palawan and Dumarán Islands, June, July, August, and September.

TYPE.—M. C. Z. 64,334 adult ♂, Puerto Princesa, Palawan Island, 4 August, 1913. W. Cameron Forbes.

CHARACTERS.—Similar to *A. tiphia tiphia* (Linné) and *A. t. viridis* (Bonaparte) of Borneo, but bill longer and heavier; the upper parts much more yellowish olive-green and the forehead, including the lores, broadly bright yellow.

MEASUREMENTS.

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No.	SEX	LOCALITY	WING	TAIL	TARSUS	CULMEN TO BASE
64,332 ♂ ad.		Palawan	64	49	20.5	19
64,333 ♂ ad.		"	62	44	21	18.5
64,334 ♂ ad.		"	62	44	20	18
86,684 ♂ ad.		Dumarán	62	46	21	18
86,685 ♂ ad.		"	61	50	19	18.5
41,304 ♀ ad.		Palawan	61	47	20	18
86,683 ♀ ad.		"	62	48	19	17

REMARKS.—The Palawan and Dumarán bird represents a very good form, easily separated from *A. tiphia tiphia* or *A. t. viridis* by its larger bill and much brighter upper parts. The series shows no individual variation, and no tendency to ever become dusky or black above.

ORTHOTOMUS RUFICEPS NUNTIUS, subsp. nov.

Three specimens from the Sulu Archipelago; an adult ♂ Sibutu, 23 August, an adult ♂ Cagayan de Sulu, 2 July, and an immature ♀ Jolo, 2 August.

TYPE.—M. C. Z. 57,529 adult ♂, Cagayan de Sulu, 2 July, 1911. W. Cameron Forbes.

CHARACTERS.—Similar to *O. ruficeps ruficeps* (Lesson), (specimens from Borneo), but slightly larger, with longer bill; upper parts clearer gray; crown slightly deeper brown.

MEASUREMENTS.

No.	SEX	LOCALITY	WING	TAIL	TARSUS	CULMEN TO BASE
57,529 ♂ ad.		Cagayan de Sulu	56	47	24	20
86,601 ♂ ad.		Sibutu	54	45	23	20.5

REMARKS.—There are, in the U. S. N. M., three skins from Sibutu similar in all respects to ours.

Birds from Palawan and Clulion Islands are somewhat smaller than those from Sulu, but agree in color more nearly with them, than they do with true *ruficeps* of Borneo.

ZOSTEROPS FORBESI, sp. nov.

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Two adult males from Camiguin Island, 2 August, 1921.

TYPE.—M. C. Z. 86,369 adult ♂, Camiguin Island, 2 August, 1921. W. Cameron Forbes.

CHARACTERS.—Similar to *Z. basilanica* Steere, but larger; upper parts much brighter and yellower,—yellowish citrine rather more strongly yellowish on head and upper tail coverts; yellow of under parts brighter and clearer—bright yellow chrome.

MEASUREMENTS.

NO.	SEX	WING	TAIL	TARSUS	CULMEN FROM BASE
86,369	♂ ad.	57	49	16	13
86,368	♂ ad.	56	47	15.5	13

REMARKS.—This new form which is well marked and quite distinct, belongs in the group characterized by possessing a wide stripe of yellow along the median under parts and gray sides and flanks. In the Philippines this group is represented by:

1. *Zosterops siquijorensis* Bourns & Worcester. Negros, Siquijor.
2. *Zosterops boholensis* McGregor. Bohol.
3. *Zosterops everettii* Tweeddale. Cebu.
4. *Zosterops forbesi* Bangs. Camiguin.
5. *Zosterops basilanica* Steere. Basilan, Bongao, Dinagat, Leyte, Mindanao, Papahag, Samar, Jolo, Tawi Tawi.

I have given the new form, which is named in honour of Governor W. Cameron Forbes, specific rank because in an enormous genus, largely composed of island forms, like *Zosterops*, I do not know where to draw the line between species and subspecies and much prefer leaving the question to be decided by some future reviewer of the genus.

Zosterops meyeri McGregor also of Camiguin Island, is a small species with *wholly* yellow under parts, belonging in a different group of the genus.

ORIOLOUS XANTHONOTUS PERSUASUS, subsp. nov.

Four adults, both sexes, Palawan, August.

TYPE.—M. C. Z. 64,180 adult ♂, Puerto Princesa, Palawan Island, 14 August, 1913. W. Cameron Forbes.

CHARACTERS.—Similar to *O. xanthonotus xanthonotus* Horsfield of Java, but larger with longer tail. Adult ♂ differing in color in much more heavily striped under parts and in the black of chest extending farther backward to include the upper breast; and much less sharply defined posteriorly against the white under parts; back more greenish yellow; yellow spot on outer tail feather large. The adult ♀ besides differing, as does the ♂, in heavier stripes below etc., has the whole pileum, occiput, upper neck, and sides of neck heavily streaked black and olive-green, and the throat and chest dull gray with whitish streaks. (A ♀ probably an older bird in the U. S. N. M.)

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has the head neutral gray with an olive wash, very conspicuously streaked with black, the black streaks extending as in the others right to base of bill).

MEASUREMENTS.

No.	SEX	LOCALITY	WING	TAIL	TARSUS	EXPOSED CULMEN
64,180	♂ ad.	Palawan: Puerto Princesa	121	78	21	23
33,225	♂ ad.	" "	118	74	20	22
64,181	♀ ad.	" "	110	69	21	21
64,179	♀ ad.	Iwahig Penal Colony	109	68	21	21

REMARKS.—The Black-headed Oriole has been recorded from Palawan and Calamianes Islands only in the Philippines. The Palawan representative form is strongly marked and easily to be distinguished from *O. x. xanthonotus* of Java.

The bird of Borneo may represent still another form, distinguished from true *xanthonotus* by slightly smaller size, the under parts less purely white, that is, much more suffused with yellowish or yellowish ochraceous, sometimes even with grayish and with the yellow tail-spots larger. This form probably should be known as *Oriolus xanthonotus consobrinus* Wardlaw-Ramsay (P. Z. S., 1879, p. 709, N. E. Borneo). Everett, however, (Birds of Borneo 1889, p. 119), in mentioning the type states that "It is dissimilar from all known immature individuals of *O. xanthonotus* and belongs rather to the *O. steerii* group." If this is true and there is in north Borneo a form of the Philippine group of Orioles, with the sexes alike in plumage and with the throat and chest plain gray, then the form of the Black-headed Oriole of Borneo, if recognized, should be named.

In old females from Java the pileum and cheeks are dark mouse-gray, blackish on the forehead, the black streaks narrow, almost obsolete and noticeable on the crown and occiput only. Females from the mainland and Borneo and Sumatra also, when adult, have faint blackish streaks on the crown. In immature plumage the head is wholly unstreaked, which I doubt to be the case in the Palawan form.

The following Publications of the Museum of Comparative Zoölogy are in preparation:—

LOUIS CABOT. Immature State of the Odonata, Part IV.

E. L. MARK. Studies on Lepidosteus, continued.

E. L. MARK. On Arachnactis.

Reports on the Results of Dredging Operations in 1877, 1878, 1879, and 1880, in charge of ALEXANDER AGASSIZ, by the U. S. Coast Survey Steamer "Blake," as follows:—

A. MILNE EDWARDS and E. L. BOUVIER. The Crustacea of the "Blake."

A. E. VERRILL. The Alcyonaria of the "Blake."

Reports on the Results of the Expedition of 1891 of the U. S. Fish Commission Steamer "Albatross," Lieutenant Commander Z. L. TANNER, U. S. N., Commanding, in charge of

K. BRANDT. The Sagittae.	W. A. HERDMAN. The Ascidians.
K. BRANDT. The Thalassicolae.	S. J. HICKSON. The Antipathids.
O. CARLGREN. The Actinarians.	E. L. MARK. Branchiocerianthus.
W. R. COE. The Nemerteans.	JOHN MURRAY. The Bottom Specimens.
REINHARD HOHRN. The Eyes of Deep-Sea Crustacea.	P. SCHIEMENZ. The Pteropods and Heteropods.
H. J. HANSEN. The Cirripeds.	THEO. STUDER. The Alcyonarians.
H. J. HANSEN. The Schizopods.	H. B. WARD. The Sipunculids.

Reports on the Scientific Results of the Expedition to the Tropical Pacific, in charge of ALEXANDER AGASSIZ on the U. S. Fish Commission Steamer, "Albatross," from August, 1899, to March, 1900, Commander Jefferson F. Moser, U. S. N., Commanding, as follows:—

---- The Volcanic Rocks.	G. O. SARS. The Copepods.	L. STEJNEGER. The
---- The Coralliferous Limestones.	Reptiles.	T. W. VAUGHAN. The Corals, Recent
G. W. MÜLLER. The Ostracods.	MARY J. RATHBUN. The Crustacea Decapoda.	and Fossil.

**PUBLICATIONS
OF THE
MUSEUM OF COMPARATIVE ZOÖLOGY
AT HARVARD COLLEGE.**

There have been published of the BULLETIN Vols. I. to LIV., LVI., and LVIII. to LXIV.; of the MEMOIRS, Vols. I. to XLII., and also XLIV. to XLVI., and XLVIII.

Vols. LV., LVII. and LXV. of the BULLETIN, and Vols. XLIII., XLVII. and XLIX. of the MEMOIRS, are now in course of publication.

The BULLETIN and MEMOIRS are devoted to the publication of original work by the Officers of the Museum, of investigations carried on by students and others in the different Laboratories of Natural History, and of work by specialists based upon the Museum Collections and Explorations.

The following publications are in preparation:—

Reports on the Results of Dredging Operations from 1877 to 1880, in charge of Alexander Agassiz, by the U. S. Coast Survey Steamer "Blake," Lieut. Commander C. D. Sigsbee, U. S. N., and Commander J. R. Bartlett, U. S. N., commanding.

Reports on the Results of the Expedition of 1891 of the U. S. Fish Commission Steamer "Albatross," Lieut. Commander Z. L. Tanner, U. S. N., commanding, in charge of Alexander Agassiz.

Reports on the Scientific Results of the Expedition to the Tropical Pacific, in charge of Alexander Agassiz, on the U. S. Fish Commission Steamer "Albatross," from August, 1899, to March, 1900, Commander Jefferson F. Moser, U. S. N., commanding.

Reports on the Scientific Results of the Expedition to the Eastern Tropical Pacific, in charge of Alexander Agassiz, on the U. S. Fish Commission Steamer "Albatross," from October, 1904, to April, 1905, Lieut. Commander L. M. Garrett, U. S. N., commanding.

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