February, and March, 1887, in Bexar, Bee, and Nueces Counties, Texas. The list includes 283 species, of which 226 were found in Bexar County. All are copiously annotated. In the first eleven pages he reviews the work of his predecessors in the same field, comparing their results with his own, and also describing the topographic and floral features of the region under consideration. He says: "At first it was my purpose to record only the results of myown observations, but upon reflection it seemed better to embody the notes of the other observers who had collected in the same localities, and thus present a pretty fair picture of the avifauna along what I believe to be an important line of faunal inosculation, if such a term be permissible." He thus quotes frequently from the observations of Dr. H. B. Butcher, Messrs. H. E. Dresser, N. C. Brown, G. B. Sennett, Dr. J. C. Merrill, and J. L. Hancock, whose papers are cited in the 'Bibliography,' with which the paper closes. He has thus not only added much original matter, but condensed in convenient form the scattered records of previous observers. Under Colinus virginianus texanus (p. 655), he gives at length his reasons for believing that C. graysoni will be found to intergrade with this form as well as with C. ridgwayi. At p. 686 he notes his interesting experience with the rare Golden-cheeked Warbler (Dendroica chrysoparia), and has many pleasant biographical notes on many of the lesser known species. This, it is sad to recall, was nearly Mr. Beckham's last work in ornithology, his death occurring even before the publication of the present paper (see Auk,

V, p. 445).— J. A. A.

Minor Ornithological Publications.—'Forest and Stream,' Vols. XXVIII and XXIX contains the following notes and papers (Nos. 1287-1388):—

1287. Food of Hawks and Owls. 'Forest and Stream,' Vol. XXVIII, No. 1, Jan. 27, 1887, p. 3.—Report of the West Chester (Pa.) Microscopical Society, giving tabulated results of the examination of Hawks' and Owls' stomachs, and also a paper of the same nature by L. S. Foster; the whole forming a most important contribution to our knowledge of this subject,

1288. The English Sparrow. By J. L. Davison. Ibid., No. 1, Jan. 27, p. 4.—Advising its extermination.

1289. Michigan Winter Bird Notes. By E. L. Mosely. Ibid., No. 1, Jan. 27, p. 4.-Notes on six species.

1290. The Terns of Muskeget Island. Editorial. Ibid., No 2, Feb. 3, p. 23.—An officer placed on the island to prevent their slaughter by millinery collectors.

1291. Midwinter Appearance of the Linnet (Carpodacus purpureus) at Halifax, N. S. By J. Matthew Jones. Ibid., No. 2, Feb. 3, p. 24.

1292. A Duck's Homing. From Rutland (Vt.) Herald. Ibid., No. 2, Feb. 3, p. 24.

1293. Snowy Owl. By A. A. A. Ibid., No. 2, Feb. 3, p. 24.-At North East, Erie Co., Pa.

1294. Canadian Game and Fish Resorts. By Ernest E. Thompson. Ibid., No. 3, Feb. 10, p. 42.—Notes on Canadian game birds.

1295. Florida Bird Notes. By H. A. Kline. Ibid., No. 3, Feb. 10, pp.

43, 44.—Contains nearly two columns and a half of interesting notes on "Herons, Egrets, and Spoonbills," as observed at St. Marks. See also *Ibid.*, Vol. XXVII, No. 25, Jan. 13, p. 484.

1296. *Hawks and Owls.* By Victor M. Haldeman. *Ibid.*, No. 3, Feb. 10, p. 44.—Mentions the action of the Pennsylvania State Board of Agriculture in urging a repeal of the 'scalp act' passed by that State. ''Last year there were expended in bounties for scalps of animals about \$100,000, 60 per cent of which was paid for Hawks' and Owls' scalps."

1297. The Terns of Matinicus Rock [Coast of Maine]. By C. E. Cahoon. Ibid., No. 3, Feb. 10, p. 44.—A denial of the accusation of Wm. G. Grant. (See *ibid*, Vol. XXVII, No. 25, Jan. 13, p. 485.)

1298. Short-cared Owls in Illinois. By J. G. Henderson. Ibid., No. 4, Feb. 17, p. 66.—"Quite plentiful....this winter" [1886-87] at Carrolton.

1299. Robins and China Berries. By Edward Jack. Ibid., No. 4, Feb. 17, p. 66. See also ibid., No. 7, Mch. 10, p. 129.

1300. The Weight of Quail in the South. By J. M. W. (Augusta, Ga.). ---"Swamp birds" said to weigh two ounces more and to be darker than those inhabiting the uplands. See also *ibid.*, No. 8, Mch. 17, p. 153, No. 11, April 7, p. 226, and No. 13, April 21, p. 274.

1301. Domesticating Ruffed Grouse. By J. B. Battelle. Ibid., No. 5, Feb. 24, pp. 83, 84.

1302. Shore Bird Nomenclature. By B. Ibid., No. 5, Feb. 24, p. 84. 1303. The Terns of Matinicus Rock. By E. A. Batchelder, Commander U. S. N. Ibid., No. 5, Feb. 24, p. 84.—Reply to C. E. Cahoon. See *ibid.*, No. 3. Feb. 10, p. 44.

1304. Old-Time Natural History. By Wm. Dutcher. Ibid., No. 6, Mch. 3, p. 105.–Extracts, relating chiefly to mammals, from a 'History of Long Island.... New York, 1839.'

1305. Prairie Owls and Scorpions. By Geo. H. Wyman. Ibid., No. 6, Mch. 3, p. 106.—Spectyto cunicularia hypogæa stated to destroy scorpions 'by scores.'

1306. The Hermit Thrush (Turdus [aonalaschkæ] pallasii) near Baltimore, Md., in Winter. By Arthur Resler. Ibid., No. 6, Mch. 3, p. 106.

1307. Description of a new Plumed Partridge from Sonora. (Callipepla elegans bensoni.) By Robert Ridgway. Ibid., No. 6, Mch. 3, p. 106. (See also Proc. U. S. Nat. Museum, 1887, pp. 148-150, published July 2, 1887.)

1308. Where do Meadow Larks Winter? By L. Ibid., No. 6, Mch. 3, p. 106.

1309. Golden Eagle in Rhode Island. By Newton Dexter. Ibid., No. 6, Mch. 3, p. 106. Capture of a specimen at Westerly about Feb. 21.

1310. The Nomenclature of Colors. Ibid., No. 7, Mch. 10, p. 128.-Review of R. Ridgway's 'A Nomenclature of Colors for Naturalists,' etc.

1311. Is the Shrike a Mimic? By A. H. G. Ibid., No. 7, Mch. 10, p. 128.—On the song of Lanius borealis. See also note by J. L. Davison, *Ibid.*, No. 9, Mch. 24, p. 176.

1312. Introduction of Blackcock into Newfoundland. From the London Field. Ibid., No. 7, Mch. 10, p. 131.

1313. The Great Auk. With cut. From the Audubon Magazine for March, 1887. Ibid., No. 8, March 17, p. 152.—Sketch of its history.

1314. Sea Bird Notes of the Grampus. By Raymond L. Newcomb. *Ibid.*, No. 8, Mch. 17, pp. 152-153.—Two columns of interesting notes on Gulls, Petrels and Jaegers as observed off the New England coast (Martha's Vineyard to Bay of Fundy), from Sept. 23 to Oct. 14. *Megalestris skua* is twice recorded as 'seen.'

1315. Eggs of Farallone Cormorant. (Phalacrocorax dilophus albociliatus Ridgway.) By Oliver Davie. Ibid., No. 8, Mch. 17, p. 153.

1316. Mother Care. By H. A. C. Ibid., No. 9, Mch. 24, p. 176.—On the breeding habits of the 'Great Northern Diver' [?]. See also *ibid.*, No. 10, Mch. 31, p. 200.

1317. Bird Notes from New Mexico. By R. W. Shufeldt. Ibid., No. 10, Mch. 31, p. 200. See also ibid., No. 14, April 28, p. 207.

1318. English Sparrow Destruction. Ibid., No. 11, April 7, p. 225. -Suggestions in regard to the English Sparrow. From the report of Dr. C. Hart Merriam, Ornithologist of the Department of Agriculture.

1319. Erratic Migrations. By W. B. A. Ibid., No. 11, April 7. p. 225.—Bird notes from Fort Simpson, B. C.

1320. Eggs of the Great Auk. By F. C. Browne. *Ibid.*, No. 11, April 7, p. 225.—Sale of two eggs at auction, in Edinburgh about 1880, one bringing one hundred pounds, the other one hundred and two guineas. See also note by Chas. A. Bramble, *ibid.*, No. 12, April 14, p. 248.

1321. Names of a Woodpecker. By W. W. Colburn. Ibid., No, 12, April 14, p. 248.—A list of thirty-six common names applied to Colaptes auratus.

1322. English Sparrows. By W. G. L. Tucker. Ibid., No. 12, April 14. p. 248.—Citing instances of albinism and melanism.

1323. Random Bird Notes [from Dansville, N. Y.] By Uncas. Ibid., No. 13, April 21, p. 274.

1324. The Audubon Society. Editorial. Ibid., No. 15, May 5, p. 317.

1325. Troubadours and Trouveres. By Sarah D. Hobart. Ibid., No. 15, May 5, p. 320. — Pleasantly written notes on certain Wisconsin

birds.

1326. Migration of the Fox Sparrow [at Lockport, N. Y.] By J. L. Davison. Ibid., No. 15, May 5, p. 320.

1327. Mongrel or Hybrid Geese. By Jay Beebe. Ibid., No. 15. May 5, p. 320. (See also ibid., No. 16, May 12, p. 345.)

1328. A Stray Pelican [P. erythrorhynchos, at Oakland, Md.]. By Sportsman. Ibid., No. 16, May 12, p. 345.

1329. Sparrows. Editorial. *Ibid.*, No. 17, May 19, p. 365.—On the action of the New York legislature in enacting a law making it penal to feed or harbor *Passer domesticus*.

1330. Grouse in Captivity. By J. B. Battelle. Ibid., No. 17, May 19, p. 365. (See also ibid., No. 19, June 2, p. 413.)

1331. The Coming of the Birds. By Edward Swift. Ibid., No. 17, May 19, p. 367.—Notes on the spring migration, at Elmira, N. Y. Recent Literature.

1332. Domesticating Wood Ducks. By M. M. Benschoter, M. D. Ibid., No. 17, May 19, p. 367.

1333. Evening Grosbeak near Buffalo. By Chas. Linden. Ibid., No. 17, May 19, p. 367.

1334. American Museum of Natural History. Editorial. Ibid., No. 18. May 26, 1887, p. 389.—On "the new exhibit of birds in their homes recently put on exhibition."

1335. Grouse and the Snow Crust. By Edward Jack. Ibid., No. 18, May 26, p. 392.

1336. Breeding Wild Geose. By M. M. Benschoter. Ibid., No. 18, May 26, p. 392.—See also ibid., No. 20, June 9, p. 432.

1337. Wisconsin Song Bird Law. Ibid., No. 18, May 26, p. 392.-The law in full.

1338. Florida Bird Notes. By H. A. Kline. *Ibid.*, No. 19, June 2, p. 412. See also *ibid.*, No. 3, Feb. 10, p. 43.

1339. Dusky Grouse Gossip. By W. B. A. Ibid., No. 20, June 9, p. 432.—On the case of "Tetrao obscurus."

1340. *Protecting the Birds*. Editorial. *Ibid.*, No. 23, June 30, p. 490. —On the work of the Audubon Society, which now has "a registered membership of 36,000."

1341. Sparrows and Insects. By Walter B. Barrows, Ass't Ornithologist, U. S. Dept. of Agriculture. *Ibid.*, No. 23, June 30, p. 490.

1342. The Barbarous English Sparrow. By F. C. Browne. *Ibid.*, No. 24, July 7, p. 513. See also note by J. L. Davison under same heading.

1343. The Ways of Prairie Dogs. By C. E. Bendire. *Ibid.*, No. 24, July 7, p. 513.—"The popular belief that the Prairie Dog, the Rattlesnake and the Burrowing Owl all live in harmony together in the same hole, is mere nonsense."

1344. Domesticating Wildfowl. By Fred Mather. Ibid., No. 24, July 7, p. 513.

1345. On the Tongue in the Humming Bird. With cuts. By R. W. Shufeldt, C. M. Z. S., etc. Ibid., No. 25, July 14, p. 531.

1346. Robins feed their Young in Cages. By Fred Mather. Ibid., No. 25, July 14, p. 531.

1347. Domesticating Ruffed Grouse. By J. B. Battelle. Ibid., No. 26, July 21, pp. 550, 551.

1348. The English Skylark on Long Island, N. Y. By L. S. Foster. -Seen, and heard singing, July 15, 1887, at Flatbush, L. I.

1349. Hummingbird and Sparrow. By Walter B. Barrows, Ass't. Ornithologist, U. S. Dep't of Agriculture. *Ibid.*, Vol. XXIX, No. 2, Aug. 4, p. 23.—Account of a battle between a Hummingbird and English Sparrow resulting, presumably, in the death of the latter. (See also note by O. O. S., *ibid.*, No. 5, Aug. 25, p. 86.)

1350. Rail in Captivity. By C. T. Rutgers. Ibid., No. 2, Aug. 4, p. 23.—Capture and confinement of a Virginia Rail with four young at Trenton, N. J.

1351. Male Quail on the Nest. By T. E. Epes. Ibid., No. 2, Aug. 4, p. 23.

1352. The Pied Duck (Camptolaimus labradorius). With cut. By R. W. Shufeldt, C. M. Z. S., etc. *Ibid.*, No. 4, Aug. 18, p. 64.—A brief account of its history.

1353. Skeletons of the Great Auk. From the 'Boston Herald.' Ibid., No. 4, Aug. 18, p. 65. Discovery of its bones in the guano deposits on Funk Island, off the coast of Newfoundland.

1354. Spencer F. Baird. Obituary. Ibid., No. 5, Aug. 25, p. 82.

1355. A Chapter on Pterylography. Three cuts. By R. W. Shu-feldt, U. S. Army. Ibid., No. 5, Aug. 25, pp. 84-85.

1356. Unusual Nesting Sites. From a paper read by Walter E. Bryant, before the California Academy of Sciences, Aug. 1, 1887. *Ibid.*, No. 5, Aug. 25, p. 86.—Notes on thirteen species.

1357. Discovery of the Nest and Eggs of the Evening Grosbeak (Coccothranstes vespertina). From a paper by Walter E. Bryant, read before the California Academy of Sciences, June 20, 1887. *Ibid.*, No. 5, Aug. 25, p. 86.

1358. Confiding Quail. By Walter B. Savary. Ibid., No. 6, Sept. 1, p. 105.

1359. Black Skimmer in New Jersey. By I. N. D. Hason. Ibid., No. 6, Sept. 1, p. 105.—Two seen at Atlantic City.

1360. *A Nebraska Collecting Trip.* By G. A. C. *Ibid.*, No. 7, Sept. 8, p. 123.—Account of one day's experience.

1361. A Tame Kittiwake Gull. From the 'Amateur Collector.' *Ibid.*, No. 7, Sept. 8, p. 124.—A very interesting account of the habits of a young Kittiwake Gull. Fresh water was refused, but salt water ''it drank of eagerly."

1362. Nighthawk and Swallow. By E. A. Leopold. Ibid., No. 8, Sept. 15, p. 144.

1363. A Feathered Waif. Ibid., No. 8, Sept. 15, p. 144.—A young Sawwhet Owl (Nyctala acadica) captured on a vessel in Lake Superior.

1364. Sparrow driven out by Worms. By A H. G. Ibid., No. 9, Sept. 22, p. 164.

1365. A new Subspecies of Petrel from Guadalupe Island. From a paper by Walter E. Bryant, read before the California Academy of Sciences. *Ibid.*, No. 10, Sept. 29, p. 183.—Description of Oceanodroma leucorhoa macrodactyla.

1366. A Coot Strikes a House. By J. Wendell, Jr. Ibid., No. 10, Sept. 29, p. 183.

1367. *Philo.* By Charles A. Bramble. *Ibid.*, No. 11, Oct. 6, p. 204. —Interesting account of a Woodcock in captivity.

1368. A September Brood of Quail. By Alfred A. Fraser. Ibid., No. 11, Oct. 6, p. 205.—Newly hatched Quail on Long Island, Sept. 14.

1369. Captive Grouse and Osprey. By Edward Swift. Ibid., No. 12, Oct. 13, p. 224.

1370. The proposed Monument to Audubon. Editorial. Ibid., No. 14, Oct. 27, p. 261.

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1371. Hints on Sparrow Destruction. By James T. Bell. Ibid., No. 15, Nov. 3, p. 283.

1372. Domesticating Wildfowl. By Fred Mather. Ibid., No. 18, Nov. 24, p. 343.

1373. Grouse in Captivity. By Jay Beebe. Ibid., No. 19, Dec. 1, p. 363.

1374. Melanerpes carolinus (Linn.) in New Jersey. By L. S. Foster. Ibid., No 19, Dec. 1, p. 363.—A male taken at Keyport, Nov. 23, 1887.

1375. Evening Grosbeak at Elmira, N. Y. By Edward Swift. Ibid., No. 20, Dec. 8, p. 383.—A male taken Nov. 25.

1376. Sex Markings of Grouse. By Edward Swift. Ibid., No. 20, Dec. 8, p. 383.—The male said to possess a slightly longer tail and an orange colored spot on the "superciliary membrane."

1377. A Queer Dick of a Woodcock. By Nor'east. Ibid., No. 21, Dec. 15, p. 403.—Interesting account of a Captive Woodcock.

1378. Sex Markings in Grouse. By Jay Beebe. Ibid., No. 22, Dec. 22, p. 428.

1379. *Plumage of the Mallard Drake*. By T. H. Streets. *Ibid.*, No. 22, Dec. 22, p. 428.—"In the summer the drake looses his green head ... and the tuft of curly feathers on the tail."

1380. Oregon Chinese Pheasants. From the 'Virginia City (Nev.) Chronicle.' *Ibid.*, No. 23, Dec. 29, p. 447.—''It is said that there are thousands of them in Willamette Valley."

1381. Unusual Nesting Sites. From a paper read Dec. 5, 1887, before the California Academy of Sciences, by Walter E. Bryant. Ibid., No. 24, Dec. 25, p. 463.—Notes on eleven species.

1382. Grouse and Mallard Plumage. By Robert Ridgway. *Ibid.*, No. 24, Dec. 25, p. 463.—"Specimens [of Grouse] not unfrequently occur, which it would be impossible to determine the sex of without dissection." The male of several species of Ducks assumes the plumage of the female in the summer.

1383. The Wood Duck in Winter. By Fred Mather. Ibid., No. 24, Dec. 25, p. 463.

1384. Snowy Owls in 1886-7. By H. A. Kline. Ibid., No. 25, Jan. 12, p. 485.

1385. Plumage of Mallard Drake. By Thos. Johnson. Ibid., No. 25, Jan. 12, p. 485.—"About 1000" Ducks were killed at Whitewater Lake, in southwestern Manitoba before October first, none of which were adult males. "But a sharp frost setting in on the third of October, one of my friends, Mr. Thomas London, killed during the forenoon of the following day, about fifty Mallards, the majority of them being 'green heads.'"

1386. Wood Duck in Winter. By Robert T. Morris. Ibid., No. 25, Jan. 12, p. 485.—On Hackensack marshes.

1387. A Taxidermist's Preparation. By H. L. Samson. Ibid., No. 25, Jan. 12, p. 485.—A preparation to preserve the color of the soft parts.

1388. Food of the European Sparrow. From papers read before the Biological Section of the Canadian Institute, by W. Brodie. *Ibid.*, No. 26, Jan. 19, p. 503.—An important paper, giving the results of the examinations of a large number of House Sparrows' stomachs.'—F. M. C.

The 'American Naturalist,' Vols. XX-XXII, contains the following (Nos. 1389-1413).

1389. The Relation of the Pectoral Muscles of Birds to the Power of Flight. By Charles L. Edwards. American Naturalist, Vol. XX, No. 1, Jan. 1886, pp. 25-29.

1390. The Torture of the Fish-hawk. By I. Lancaster. Ibid., No. 3, March, 1886, pp. 223-230, pl. XI.—Fish-hawks robbed by Frigate Birds.

1391. Note on the Problem of Soaring Birds. By J. E. Hendricks. Ibid., No. 3, March, 1886, pp. 294-295.

1392. The Mechanics of Soaring. By I. Lancaster. Ibid., No. 4, April, 1886, pp. 326-333.

1393. The Soaring of Birds. By I. Lancaster. Ibid., No. 4, April, 1886, pp. 390-392.

1394. Gravitation and the Soaring of Birds. By I. Lancaster. Ibid., No. 6, June, 1886, pp. 514-521.

1395. Observations on Young Hummingbirds. By H. S. Greenough. Ibid., No. 6, June, 1886, pp. 528-532.

1396. The Mechanics of Souring. By Prof. J. E. Hendricks. Ibid., No. 6, June, 1886, pp. 532-534.

1397. The Yellow-billed Magpie. By Barton W. Evermann. Ibid., No. 7, July, 1886, pp. 607-611.

1398. Mechanics of Soaring. By I. Lancaster. Ibid., No. 7, July, 1886, pp. 653, 654.

1399. Crow Roosts and Roosting Crows. By Samuel W. Rhoads. Ibid., No. 8, Aug., 1886, pp. 691-701; No. 9, Sept., 1886, pp. 777-787.

1400. The Wings of Birds. By I. Lancaster. Ibid., No. 8, Aug., 1886, pp. 701-708.

1401. Some Notes on Bird Migration. By F. E. L. Beal. *Ibid.*, No. 9, Sept., 1886, pp. 817-819.—At Chicago.

1402. Domestication of Wild Fowl. By Fred. Mather. Ibid., No. 9, Sept., 1886, pp. 820-821; ibid., Vol. XXI, No. 8, Aug., 1887, p. 778.

1403. Protracted Flight of a Golden Plover. By H. E. Stockbridge. *Ibid.*, No. 10, Oct., 1886, pp. 898, 899.—The bird alighted on a ship in Lat. 37° N., Long. 156° W.

1404. Birds killed by Electric Light Towers at Decatur, Ill. By E. A. Gastman. 'Ibid., No. 11, Nov., 1886, p. 981.

1405. The Nesting of Collyrio ludovicianus. By Sanborn Gove Tenney. Ibid., Vol. XXI, No. 1, Jan., 1887, p. 90.—At Williamstown, Massachusetts.

1406. Some Rare Indiana Birds. By B. W. Evermann. Ibid., No. 3, March, 1887, pp. 290, 291.

1407. The Origin of a Small Race of Turkeys. By John Dean Caton. Ibid., No. 4, April, 1887, pp. 350-354. 1408. The Relative Weight of the Brain of Regulus satrapa and Spizella domestica compared to that of Man. By Joseph L. Hancock. Ibid., No. 4, April, 1887, p. 389.

1409. Birds Roosting in a Town. By T. C. Palmer. Ibid., No. 10, Oct., 1887, pp. 939, 940.

1410. The Migration of the American Magpie to Eastern Nebraska, Twenty-five Years Ago. By W. Edgar Taylor. Ibid., No. 12, Dec., 1887, pp. 1122, 1123.

1411. Missouri River Crow Roosts. By W. Edgar Taylor. Ibid., No. 12, Dec., 1887, pp. 1123, 1124.

1412. On Cormorant Fishing in Japan. By P. L. Jouy. Ibid., Vol. XXII, No. 253, Jan., 1888, pp. 1-3.

1413. The Relative Weight of the Brain to the Body in Birds. [By J. L. Hancock.] Ibid., No. 258, June, 1888, pp. 537-539.

'Science,' Vols. VII-XII, Jan. 1886-Jan. 1889, contains the following (Nos. 1414-1445.)

1414. The English Sparrow. By W. R. Shufeldt. 'Science,' Vol. VII, No. 152, Jan. 1, 1886, p. 14.

1415. English Sparrows. By C. I. and J. D. Hicks. Ibid., No. 153, Jan. 8, 1886, pp. 35, 36.

1416. The English Sparrow. By Ernest Ingersoll. Ibid., No. 155, Jan. 22, 1886, p. 80.

1417. The Present Wholesale Destruction of Bird-Life in the United States. By J. A. Allen. *Ibid.*, No. 160, Supplement, Feb. 26, 1886, pp. 191-195.

1418. Destruction of Birds for Millinery Purposes. [By J. A. Allen.] Ibid., No. 160, Supplement, Feb. 26, 1886, pp. 196, 197.

1419. Destruction of Bird Life in the Vicinity of New York. By William Dutcher. Ibid., No. 160, Supplement, Feb. 26, 1886, pp. 197-199.

1420. Destruction of the Eggs of Birds for Food. By Geo. B. Sennett. Ibid., No. 160, Supplement, Feb. 26, 1886, pp. 199-201.

1421. The Relation of Birds to Agriculture. [By J. A. Allen.] Ibid., No. 160, Supplement, Feb. 26, 1886, pp. 201, 202.

1422. Bird Laws. By J. A. Allen.] Ibid., No. 160, Supplement, Feb. 26, 1886, pp. 202-204.

1423. An Appeal to the Women of the Country in behalf of the Birds. [By J. A. Allen.] Ibid., No. 160, Supplement, Feb. 26, 1886, pp. 204-205.

1424. The Destruction of Birds. By F. H. H. and Amos W. Butler. Ibid., No. 162, March 12, 1886, pp. 241, 242.

1425. Bird-killing Sparrows. By C. D. White. Ibid., Vol. VIII, No. 180, July 16, 1886, p. 58.

1426. Bird Destruction. By J. A. Allen. Ibid., No. 183, Aug. 6, 1886, pp. 118, 119.

1427. Carnivorous Prairie Dogs-Carnivorous Orioles. By W. O. Ayres. Ibid., No. 185, Aug. 20, 1886, p. 165.

1428. On the Flight of Birds. By Harrison Allen. Ibid., Vol. IX, No. 214, Mar. 11, 1887, p, 232.

1429. Specific Variations in the Skeletons of Vertebrates. By R. W. Shufeldt. Ibid., No. 221, April 29, 1887, pp. 414-416.

1430. The Maxillo-palatines of Tachycineta. By Frederic A. Lucas. *Ibid.*, No. 223, May 13, 1887, pp. 461, 462. See also R. W. Shufeldt, *ibid.*, No. 226, June 3, 1887, p. 538, and Frederic A. Lucas, *ibid.*, Vol. X, No. 230, July 1, 1887, p. 12.

1431. Another Muscle in Birds of Taxonomic Value. By R. W. Shufeldt. Ibid., No. 229, June 24, 1887, pp. 623, 624.

1432. The Wanton Destruction of the Florida Heronries. By R. W. Shufeldt. Ibid., Vol. X, No. 233, July 22, 1887, pp. 47, 48.

1433. Robin's Nest. By C. H. Leete. Ibid., p. 48.—Repeated repairing of old nests.

1434. The Dermo-Tensor Patagii Muscle. By R. W. Shufeldt. Ibid., No 234, July 29, 1887, p. 57.

1435. Robin's Nest. By J. A. Allen. Ibid., p. 60.—Other cases similar to that narrated in No. 1433.

1436. Pars Propatagialis musculi cucullaris. By Leonhard Stejneger. Ibid., No. 235, Aug. 5, 1887, pp. 70, 71.

1437. Robin's Nest. By H. M. Hill. Ibid., p. 72.—Another case of repeated repairing of old nests.

1438. Diagnosis of a New Species of Thrush (Turdus celænops sp. nov.) from Japan. By Leonhard Stejneger. Ibid., No. 238, Aug. 26, 1887, p. 108.

1439. The Flight of Birds. By J. S. Newberry. Ibid., No. 254, Dec. 16, 1887, pp. 299, 300.

1440. The Mechanism of the Flight of Birds. By Elliott Coues. Ibid., No. 256, Dec. 30, 1887, pp. 321-322.

1441. [The flight of birds.] By W. S. Strode. Ibid., p. 322.

1442. The Flight of Birds. By J. S. Newberry and W. P. Trowbridge, *Ibid.*, Vol. XI, No. 257, Jan. 6, 1888, pp. 9, 10. See also Frederic A. Lucas, *ibid.*, No. 261, Feb. 3, 1888, pp. 58, 59.

1443. Reappearance of our Native Birds. Editorial. Ibid., Vol. XII, No. 287, Aug. 3, 1888, p. 49.—Supposed unusual abundance of birds.

1444. Our Native Birds. By Bradford Torrey and Frank M. Chapman. *Ibid.*, No. 288, Aug. 10, 1888, p. 71.—Letters denying any increase in numbers of native birds. See also No. 1445.

1445. Our Native Birds. By Wm. T. Davis, R. B. Fulton, and L. N. Johnson. *Ibid.*, No. 290, Aug. 24, 1888, p. 96.—Letters affirming no increase in their numbers, noting a decrease, and referring the rumored increase to the fact of a storm during the spring migration having driven many small birds into city streets and other unusual places.

'The Quarterly Journal of the Boston Zoological Society,' whose publication ended with Vol. III, No. 1, contains the following (Nos. 1446-1459) in Vols. II and III. For Vol. I, see Bull. N. O. C., VIII, 233.

1446. First Capture of Nauclerus forficatus in Massachusetts. By Arthur P. Chadbourne. 'The Quarterly Fournal of the Boston Zoölogical Society,' Vol. II, 1883, p. 16.

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1447. Birds around Boston during the Winter of 1882-3. By Arthur P. Chadbourne. Ibid., pp. 31, 32.

1448. Occurrence of the Swamp and White-throated Sparrows at Cambridge, Mass., in Winter. By Charles R. Lamb. Ibid., p. 32.

1449. Notes on Colaptes auratus, containing some Theories regarding Variation in Plumage. By C. J. Maynard. Ibid., pp. 33-36.

1450. Occurrence of the Connecticut Warbler (Oporornis agilis) in Massachusetts in Spring. By C. J. Maynard. Ibid., pp. 43,44.

1451. Cuban Night Hawk (Chordeiles popetue minor) in Florida. By C. J. Maynard. Ibid., p. 44.

1452. Descriptions of Three New Species of Birds from Santo Domingo. By Charles B. Cory. Ibid., pp. 45,46.

1453. Ornithological Notes from Minnesota. By Foster H. Brackett. Ibid., pp. 47-49; Vol. III, pp. 7-16.

1454. Notes on New Brunswick Birds. By Arthur P. Chadbourne. Ibid., Vol. II, pp. 50-53.

1455. Notes on the Differences between Cory's Shearwater, Puffinus borealis. and the Greater Shearwater, Puffinus major. By C. J. Maynard. Ibid., pp. 53,55.

1456. Dendræca palmarum palmarum in Belmont, Mass. By C. R. Lamb. Ibid., p. 55.

1457. Occurrence of the White Heron (Herodias egretta) at Quincy, Mass. By C. J. Maynard. Ibid., pp. 55, 56.

1458. Occurrence of the Pileated Woodpecker (Hylotomus pileatus) in Eastern Massachusetts. By Foster H. Brackett. Ibid., Vol. III, p. 17.

1459. Capture of the Black-backed Three-toed Woodpecker (Picoides arcticus) at West Medford, Mass. By F. W. Bridge. Ibid., p. 17.

'Random Notes on Natural History' closed its existence with Vol. III (1886). For references to Vols. I and II, see Auk, III, 270-272. Vol. III contains the following (Nos. 1460-1486).

1460. A Collecting Trip in the Magdalens. By G. W. F[ield]. 'Random Notes on Natural History,' Vol. III, No. 1, Jan., 1886, pp. 3, 4.

1461. Immaculate Eggs of Song Sparrows. By J. N. Clark. Ibid., No. 1, Jan., 1886, p. 8.

1462. [Winter Birds in Rhode Island.] [By F. T. Jencks.] Ibid., No. 2, Feb., 1886, p. 9.

1463. On the Breeding Habits of the Red-shouldered Hawk. [By C. E. Doe.] Ibid., No. 2, Feb., 1886, p. 11.

1464. [Winter Birds in Larimer Co., Colorado.] By W. G. S[mith]. Ibid., No. 2, Feb., 1886, p. 13.

1465. [Nest of Rock Wren.] By Wm. G. Smith. Ibid., No. 3, March, 1886, p. 17.

1466. [*Turkey Buzzard.*] By John H. Steele. *Ibid.*, No. 3, March, 1886, p. 19.

1467. [Sea Doves near Warwick, R. I.] [By J. M. Southwick.] Ibid., No. 3, March, 1886, p. 23. 1468. [Nest and Eggs of Myindestes townsendii.] By Wm. G. Smith, Ibid., No. 4, April, 1886, p. 25.

1469. [Spring Birds. By F. T. Jencks.] Ibid., No. 4, April, 1886, p. 27. 1470. Yelping a Gobbler. By [A. B.] B[aker]. Ibid., No. 5, May, 1886, p. 33.

1471. Strange Behavior of a Blue Jay. By A. A. Hinkley. Ibid., No. 5, May, 1886, pp. 33,34.

1472. Bohemian Waxwings. By Dean W. Park. Ibid., No. 5, May, 1886, p. 34.

1473. Seasonable Notes. [By F. T. Jencks.] Ibid., No. 5, May, 1886, p. 37.

1474. ['Economic Ornithology.'] [By J. M. Southwick.] Ibid., No. 6, June, 1886, pp. 41, 42.

1475. [Myiadestes townsendii and Sialia sialis.] By D. D. Stone. Ibid., No. 6, June, 1886, p. 42.

1476. Seasonable Notes. [By J. M. Southwick.] Ibid., No. 6, June, 1886, p. 42.

1477. [Yellow-crowned Night Heron near Tiverton, R. I.] [By J. M. Southwick.] Ibid., No. 7, July, 1886, p. 49.

1478. [Notes from Colorado.] By Wm. G. Smith. Ibid., No. 9, Sept., 1886, p. 66,67.

1479. Plant Lice, Lady Bugs, and Sparrows. [By J. M. Southwick.] Ibid., No. 10, Oct., 1886, pp. 76.77.

1480. Tennessee Warbler in Rhode Island. [By J. M. Southwick.] Ibid., No. 10, Oct., 1886, p. 79.

1481. Purple Gallinule. [By J. M. Southwick.] *Ibid.*, No. 10, Oct., 1886, p. 79.—["This was the third capture, not the second as stated."—J. M. Southwick, *in litt.*]

1482. Sitta Canadensis. By Ellison A. Smyth, Jr. Ibid., No. 11, Nov., 1886, p. 85.

1483. [Barn Owl and Razor-billed Auk in Rhode Island.] [By J. M. Southwick.] Ibid., No. 11, Nov., 1886, p. 91.

1484. [Ruddy Duck]. By Thos. W. Fraine. Ibid., No. 12, Dec., 1886, p. 98.

1485. [Orioles nesting.] By John N. Clark. Ibid., No. 12, Dec., 1886, p. 98.

1486. [Myiarchus dominicensis at Charleston, S. C.] By E[llison] A. S[myth, Jr.] Ibid., No. 12, Dec., 1886, p. 99.—C. F. B.

Publications Received.—Alfaro, Anastasio. Reseña de las principales aves que habitan la parte superior del volcán de Poás. (Gaceta Oficial, No. 288. Dec. 9, 1888).

Allen, J. A. (1) Notes on a Collection of Birds from Quito. (Bull. Am. Mus. Nat. Hist., II, pp. 69-76.) (2) List of Birds collected in Bolivia by Dr. H. H. Rusby, with Field Notes by the Collector. (Ibid., pp. 77-112.)

Bergtold, W. H. A list of the Birds of Buffalo and Vicinity. (Bull. Buffalo Naturalists' Field Club. Also separate, pp. 21, 1889.)

Cory, C. B. The Birds of the West Indies, including all species known