37. **Vireo olivaceus** (*Linn.*) *Vieill.* RED-EYED VIREO.— Common.

38. **Vireo philadelphicus** *Cass.* PHILADELPHIA VIREO.—Taken only at Grand Falls in May, singing in the hard woods.

39. **Vireo solitarius** *Vieill.* SOLITARY VIREO.—This species was apparently not very common at Fort Fairfield. It was not seen at Grand Falls. Mr. McLeod gives it in his notes as "quite common" at Houlton.

40. **Pyrangra rubra** (*Linn.*) *Vieill.* SCARLET TANAGER.—Not rare in the hard woods at Grand Falls. The people there call them "war-birds." We did not see them at Fort Fairfield, though we have reason to think that they occur. At Houlton Mr. McLeod says they are "rare. They arrive May 29. I have not found the nest, but have a young one taken here. They remain all summer."

Recent Literature.

DR. COUES' NEW CHECK LIST AND DICTIONARY.*—Judging from advance sheets lately received, this new treatise by Dr. Coues will occupy a previously unclaimed place among ornithological works; for, as its title indicates, it is much more than a catalogue of North American birds. Its novel feature is a dictionary of etymology, orthography and orthoëpy of scientific names, to which is devoted the lower portion of each page of the running list. In this department the generic, specific and varietal names—duplicated from the text above with the addition of the diacritical marks for quantities, accents and division of syllables—are exhaustively treated; their derivation and meaning being explained, their construction scrutinized, their spelling revised, and their applicability in each particular case carefully considered. The erudition and scholarly research involved in this undertaking must be apparent to the most casual reader. The practical value of the work is equally plain, and perhaps it is not too much to say that it calls for a fuller measure of gratitude on the part of ornithologists than anything which its versatile author has hitherto produced.

A detailed consideration of the Check List proper must necessarily be deferred until the appearance of the complete work; pending this, we may simply say that the plan followed by Dr. Coues is essentially to make a second edition of his original list, with all the required additions and corrections to date, and such revision of nomenclature as seemed desirable

* The Coues Check List of North American Birds, revised to date and entirely rewritten under direction of the author, with a Dictionary of the Etymology, Orthography and Orthoëpy of the scientific names, the Concordance of previous lists, and a Catalogue of his Ornithological Publications. Boston: Estes and Lauriat. 1882. 1 vol. roy. 8vo. pp. 165.

and practicable. Ten species are subtracted, and one hundred and twenty added, while names are changed for various reasons in probably more than a hundred cases. A simple system of reference numbers forms a concordance of the present and original edition, as well as with Baird's list of 1858 and Ridgway's of 1880. The total number of species and varieties enumerated is eight hundred and eighty-eight.

It should be mentioned that the introductory portion of the work includes an analysis of the present list as compared with that of 1874, and an important chapter entitled "Remarks on the use of names." The latter is devoted to a general consideration of the technique of Greek and Latin scientific names and the principles governing their derivation, spelling and pronunciation.

The book ends with a catalogue complete to date of the author's ornithological publications. We understand that the edition will be offered to the public before the close of the present month. May it meet with the cordial reception which it so richly merits.—W. B.

Nests and Eggs of Ohio Birds. — It is always a pleasure to record the progress of this notably meritorious work — a pleasure which we trust will be ours until the completion of the design which the authors have thus far carried out so successfully. As we have before remarked, there has been nothing since Audubon in the way of pictorial illustration of American Ornithology to compare with the present work — nothing to claim the union of an equal degree of artistic skill and scientific accuracy. We have no knowledge of the financial aspects of the case; but, as such a work is necessarily expensive, we can only trust that it continues to receive the support it so richly deserves. It is, we believe, sold only by subscription. The last number which has reached us is a double one, being parts 10 and 11, dating Oct. 1881 and Jan. 1882, containing Plates XXVIII–XXXIII, and pages 107-118. Plate 18 is perhaps the first in which the authors have introduced a bird — being the head of the Purple Martin protruding from the orifice of the C gourds so frequently put up in the South for its accommodation. This figure shows that Mrs. Jones can draw and paint a bird as well as its nest and eggs — and we should not be surprised if other birds appeared with their nests in future numbers. The temptation thus to enlarge upon the original plan of the work must be at times almost irresistible. Plate 29 is *Euspiza americana*, the simple nest of which gives less scope for the artist's skill than the elaborately finished surroundings of the Song Sparrow's nest of Plate 30. The extremes of size and coloring of the eggs of *Melospiza* are well portrayed, as are those of the Thrasher, the rough exterior of whose nest fairly bristles on Plate 31. One of the most artistic pictures of the whole series is the lowly nest of *Helminthophaga pinus* (Plate 32), with its characteristic surroundings at the foot of a slight bush clump. It is interesting to note in this case the curious "protective mimicry" by which the nest resembles a bunch of dead leaves and dried bark strips blown and caught among the roots of a bramble. One would have sharp eyes who would

at first glance see it was something else. The last plate (33) represents the nest of the Summer Tanager, furnishing a good illustration of a "saddled" nest—by which we mean one placed directly upon a large horizontal bough, only confined by a few slight upright twigs. The text consists, as usually heretofore, of a folio to each plate, and continues to be prepared by Dr. Howard E. Jones. We find it to be a perfectly reliable account of the objects represented. The authors evidently have spared no pains or expense in maintaining the high standard of excellence they set for themselves at the beginning. — E. C.

PROF. MACOUN'S REPORT OF EXPLORATION.* — We hear so seldom from our friends of the Dominion, as far as ornithology is concerned, that the present contribution would be welcome as an index of their activity, even were it of less importance than we find it to be. It is difficult to cite the brochure correctly, as it has no title-page and bears no date or place of publication, and may be an "extra" of a portion of some more extensive government publication. However this may be, the pamphlet which reaches us through Professor Macoun's kind attentions is the report of the Surveyor General to the Minister of the Interior, consisting chiefly (pp. 8-40) of Professor Macoun's own report of his explorations during the summer of 1880 of that portion of the Souris River Valley lying within British Territory and of the adjoining region to the west and north — that is to say, north of our territories of Dakota and Montana. The region is one seldom examined even incidentally in the interests of ornithology, and the present paper possesses decided value, as the observer appeared to have paid special attention to the distribution of birds in the wide area traversed. After a résumé of the leading ornithological features of the region is presented an annotated list of the species secured, 109 in number. This list may be profitably examined in connection with the article on the birds observed along the parallel of 49° by the Northern Boundary Commission in 1873 and 1874. We feel at liberty to call attention to some manuscript alterations made by the author in our copy. For *Coturniculus passerinus* read *Zonotrichia albicollis;* for *Myiarchus crinitus*, read *Tyrannus verticalis;* for *Archibuteo lagopus*, read *A. ferrugineus*, the range of which is thus carried beyond any point hitherto given; for *Tringa canutus* read *T. bairdi;* for *Podilymbus podiceps*, read *Podiceps californicus.* We could wish the report were better printed; but poor presswork is the usual fate of public documents, English or American. — E. C.

KNOWLTON'S REVISED LIST OF THE BIRDS OF BRANDON, VERMONT.† — This is a briefly annotated list of 149 species occurring in the immediate

* Extract from a Report of Exploration by Professor John Macoun, M. A., F. L. S. Report of Department of Interior (n. d., n. p. Ottawa, 1881? 8vo, pp. 48.)

† A Revised List of the Birds of Brandon, Vt. and vicinity. By F. H. Knowlton. The Brandon Union (newspaper), February 10, 1882. See also, by the same author:—A Partial List of the Birds of Brandon, Vt. The Brandon Union, December 13, 1878.

Remarks on some Western Vermont Birds. Bull. Nutt. Ornith. Club, Vol. VII, January, 1882, pp. 63, 64.

vicinity of Brandon. The author says: "A few more species doubtless occur, especially among the Waders and Swimmers, but as they have never been actually noted, they have been rigidly excluded." An examination of the List shows that, with perhaps one or two exceptions, he has succeeded in adhering to this principle, the result being a very reliable list as far as it goes. The further application of this rule doubtless accounts for the fact that many of the species are not stated to breed that yet no doubt do so.

The chief interest of the List lies in its bearing upon the extent of the Alleghanian fauna in the Champlain valley. The breeding of such species as *Dendræca striata* and *Zonotrichia leucophrys*, the occurrence of *Perisoreus canadensis* and *Picoides arcticus*, and the absence of *Ortyx virginiana* and one or two other species, are almost the only exceptions to an otherwise strictly Alleghanian fauna.

A number of species, especially among the migrants, would seem, from what the writer says, to be by no means numerous at this locality, and no doubt his statements are strictly in accordance with his experience. We have reason to believe, however, that a more thorough search might reveal greater numbers of some of these species.

It is to be regretted that Mr. Knowlton's List could not have appeared elsewhere than in the columns of a newspaper, both for the sake of giving it a more permanent form, and of avoiding the typographical errors inevitable under such circumstances. It may be worth while here to mention that by a slip of the pen Mr. Knowlton has recorded Wilson's Plover (*Ochthodromus wilsonius*) instead of Wilson's Snipe.—C. F. B.

KRUKENBERG ON THE COLORING MATTER OF FEATHERS.*—This paper, the first of a series, seems to be the product of more careful work than previous publications on the subject. The author first states positively that the color may change after growth, the feather becoming lighter or darker as the case may be, but postpones deciding whether the change is the result of external or internal causes. Judging from the effects of stimulants upon Canaries with *fully* grown feathers, I have no doubt that internal changes play an important part. At least, almost white Canaries will become very yellow, gray sometimes appearing, if properly fed.

Turacin, a red or purple-violet pigment, found in the feathers of the *Musophagidæ* is first considered. Attention was first called to this pigment by Verreaux, who found that the purple-violet in the wing feathers of *Corythaix albicristatus* was destroyed by wetting, but returned on drying. Later it was observed that the water in which these birds bathed became colored dark red. Facts worthy of consideration by all systematic ornithologists. Turacin is soluble in weak alkalies, insoluble in acids, and slightly soluble in water, especially if warm. It may be precipitated as an amorphous red powder by the action of acids. In solution the

* Dr. C. Fr. W. Krukenberg. Die Farbstoffe der Federn, in Dessen Vergleichend-physiologische Studien. I Reihe, V Abth., 1881, s. 72-92. Plate III.

spectrum of Turacin is marked by two absorption bands, between D and E, much resembling those of oxyhemaglobin. Carbon dioxide and oxygen, however, have no effect on the color or the spectrum. As to its chemical composition the author differs from his predecessors in that he denies the presence of nitrogen, though copper and iron are both present in considerable quantities. By the action of concentrated sulphuric acid two products are formed, named α Turaceïn and β Turaceïn by the author.

Zoönerythrin, another red pigment of much wider distribution, is found in red feathers, as those of the Flamingo and the Cardinal Grosbeak. It is soluble in alcohol, ether, bisulphide of carbon, and the like, from which it can be precipitated by evaporation. The solution of this pigment is often favored by first digesting the feather in a trypsin or pepsin solution. Unlike Turacin, Zoönerythrin has no absorption bands, but all is absorbed beyond E.

Zoöfulvin, a yellow pigment of much the same solubility as the preceeding, occurs in the yellow feathers of the European Oriole, the Canary, and the like. The spectrum has two bands between F and G which vary in position according to the solvent used.

As yet Dr. Krukenberg has been unable to extract any green, blue, or purple pigment from feathers, so that he agrees with Bogdanon that blue feathers have no pigment as proved by transmitted light. Of this any one can at once convince himself by holding the feather of a Bluebird immersed in water between himself and a window.—J. Amory Jeffries.

Minor Ornithological Papers. — 161. *The Ruddy Duck* (*Erismatura rubida*). By Spencer Trotter, *Chicago Field*, Vol. XIII, p. 23.—Brief general account, including reference to their occasional great abundance in Chesapeake Bay.

162. *Bibliographical Manuals of American Naturalists. Chapter II. Dr. Elliott Coues, U. S. A.* By William Hosea Ballou. *Ibid.*, XIII, pp. 92, 103, 123, 189, 205, 221.— Rather more tha.i 400 titles of papers and works, relating mainly to ornithology.

163. *Nomenclature of the North American Grouse.* By Spencer Trotter. *Ibid.*, XIII, pp. 314, 315.— Common and scientific names of North American Grouse, with their principal synonymy and habitats.

163. *The California Quails in Missouri.* By H. Clay Ewing. *Ibid.* XIII, p. 413.— Six or seven pairs, turned out near the junction of the Missouri and Osage Rivers in March 1879, raised broods the following season near where they were liberated.

164. *Bibliographical Manual of American Naturalists. Chapter III. The Literature of Prof. Edward D. Cope.* By Wm. Hosea Ballou. *Ibid.* XIV, pp. 19, 20.— Contains a few ornithological titles.

165. *Can the Pinnated Grouse be successfully propagated?* By H. W. Merrill. *Forest and Stream*, XVI, Feb. 10, 1881, p. 28.—Believes they can be "successfully propagated" with proper "regard to cover, food and range."

166. *Pine Grosbeak* (*Pinicola enucleator*, L., V.) *and Robin* (*Turdus migratorius*, L.) *in Winter* [*in Nova Scotia*]. By. J. Matthews Jones.

Ibid., XVI, March 13, 1881, p. 86.—The former "quite common"; small flocks of the latter frequent the spruce woods every winter, in Point Pleasant Park, Halifax peninsula.

167. *The "Crane's Back."* By J. C. Merrill. *Ibid.*, XVI, March 10, 1881, p. 105.—A Cree Indian account of the *napite-shu-utle*. a bird said to migrate by taking passage on the backs of Cranes. The bird is believed to be a Grebe.

168. *A Hawk new to the United States.* By Robert Ridgway. *Ibid.*, XVI, Apr. 14, 1881, 206.—From Oyster Bay, Fla., provisionally referred to *Buteo fuliginosus*. (See this *Bull.*, VI, Oct. 1881, p. 207.)

169. *The Pine Grosbeak.* By Chas. E. Ingalls. *Ibid.*, XVI, Apr. 14, 1881, pp. 206, 207.—Observations on its habits in winter in Massachusetts.

170. *Our unique Spoon-billed Sandpiper, Eurinorhynchus pygmæus* (Linn.). By Tarleton H. Bean. *Ibid.*, XVI, Apr. 21, 1881, p. 225.—Brief general history of the species, with record of its capture at Plover Bay, Eastern Siberia, and Point Barrow, Alaska.

171. *Domesticated Quail.* By Henry Benbrook. *Ibid.*, XVI, May 5, 1881, p. 266.—*Ortyx virginianus* successfully reared in captivity to the third generation. Believes that under favorable circumstances they could be bred "as easily as Turkeys."

172. *Great Carolina Wren.* By William Dutcher. *Ibid.*, XVI, July 14, 1881, p. 473.—Record of its capture at Greenville, N. J., within four miles of New York City.

173. *The Rail we shoot.* [By George B Grinnell.] *Ibid.*, XVII, Sept. 22, 1881, pp. 146, 147.—Classification, diagnoses and habitats of the *Rallidæ* of the United States.

174. *Range and Rotary Movements of Limicolæ.* By W. Hapgood. *Ibid.*, XVII, Oct. 20, 1881, pp. 225-228.—An important and suggestive paper on the migrations and range of American *Limicolæ*. The greater part of the species of this group are noticed at length. The paper relates especially to the winter haunts of these birds, and the conclusion is pretty fairly sustained that many of them pass beyond the tropics to winter in the Southern Hemisphere.

175. *Migration of Shore Birds.* By M. H. Simons. *Ibid.*, XVII, Nov. 10, 1881, p. 288.—Apropos of Mr. Hapgood's paper (see No. 174). the writer calls attention to the fact that many kinds of Shore Birds winter in Florida and the other Gulf States. "Didymus." under the same caption, has some pertinent suggestions in reference to Mr. Hapgood's paper.

176. *The Herring Gull and the Ring-bill on Georgian Bay.* By Rev. J. A. Langille. *Ibid.*, XVII, Nov. 17, 1881, p. 307.—On the habits, etc., of these species at their breeding haunts in Georgian Bay.

177. *Beechnuts and Woodpeckers.* By C. Hart Merriam, M. D. *Ibid.*, XVII, Dec. 1, 1881, p. 347.—A reply to several pseudonymous articles in previous numbers of this journal (*Forest and Stream*) in reference to the Red-headed Woodpecker's habit of eating beechnuts. Other notes on the same subject, by various contributors, follow in this and succeeding numbers.

178. *The Enemies of Game Birds.* By Adolphe B. Covert [and others]. *Ibid.*, XVII, Dec. 8, 1881, p. 366, Dec. 22, p. 407, and Dec. 29, p. 428. —Various enemies are mentioned, among whom the Red Squirrel is prominent.

179. *Habits of Woodpeckers.* By W. Beeke [and others]. *Ibid.*, XVII, Dec. 15, 1881, p. 387.—In reference to their laying up stores of beechnuts for winter use, particularly refers to the Red-headed Woodpecker.

180. *Inquiries about the Snow Grouse* [lege Goose]. By William Dutcher. *Ibid.*, XVII, Dec. 22, 1881, p. 407.—In reference to the distribution of *Anser hyperboreus* on the Atlantic coast, and to the change of plumage in the Blue Goose (*A. cærulescens*) in captivity.

181. *The Sparrow Curse in Australia. Ibid.*, XVII, Dec. 22, 1881, pp. 407, 408.—Abstract of a "progress report" of a government commission appointed to investigate "alleged injuries caused to fruit growers, gardeners, farmers and others by [the imported] Sparrows." The analysis of the testimony taken is suggestive reading in its bearing upon the "Sparrow Pest" of our own country.

182. *The Snow Goose and Blue Goose.* By C. S. Wescott. *Ibid.*, XVII, Jan. 5, 1882, p. 447.—Respecting their specific diversity, and on the occurrence of the Snow Goose in Delaware Bay. This is followed by a communication (under the same caption) from Arthur Edward Brown, who states that seven Blue Geese have lived seven years in the Philadelphia Zoological Garden without showing any material change of color.

183. *Der Schwalbenweih* (*Nauclerus forficatus*). Von H. Nehrling. *Ornithologisches Centralblatt*, VI, No. 2, 15 Jan. 1881, pp. 9, 10.—Account of its habits, etc., as observed in Texas.

184. *Der Gelbkopfstärling oder Gelbkopftrupial* (*Xanthocephalus icterocephalus* Baird). Von H. Nehrling. *Ibid.*, VI, No. 11, 1 Juni, 1881, pp. 81-84, No. 13, 1 Juli, 1881, pp. 97, 98.—General history.

185. *Die Wandertaube* [*Ectopistes migratorius*]. Von Chas. L. Mann. *Ibid.*, VI, No. 21, 1 Nov. 1881, pp. 164-166. (Aus: *Jahresber. des Naturhist. Vereins in Wisconsin* 1880-81.)—On the great numbers destroyed by pigeon hunters for the market. Contains interesting statistics of the slaughter and the manner in which it is prosecuted.

186. *Zwei amerikanische Prairiefinken.* Von H. Nehrling. *Monatsschrift des Deutschen Vereins zum Schuke der Vogelwelt*, VI Jahrg., No. 3, März, 1881, pp. 58-64.—General account of the "Lerchenfink (*Chondestes grammica* Bp.)" and the "Savannenfink (*Passerculus savanna* Bp.)."

187. *Ornithologische Beobachtungen aus Texas.* II. Von H. Nehrling. *Ibid.*, VI, No. 5, Mai, 1881, pp. 111-121. (See this Bulletin, VI, p. 109.)

188. *Nordamerikanische Vögel im Freileben geschildert.* Von H. Nehrling. *Die gefiederte Welt. Zeitschrift für Vogelliebhaber, -Zuchter und -Händler*, X Jahrg., 1881.—Under this title Dr. Nehrling contributes a series of well-written popular articles on various North American birds. In the present volume are the following: (1) Das Rubingoldhähnchen (*Regulus calendula* Lichtst.), *l. c.* pp. 14-16, 24-26. (2) Der blauköpfige

oder Brewer's Stärling, *Scolecophagus Breweri*, Nehrl. *S. cyanocephalus* Cab. . . .), pp. 44-46, 57, 58. (3) Der Kentuckysänger oder Buschsänger (*Sylvia–Opornis* [sic.] — *formosa* Wils. . . .), pp. 100-102. (4) Die Einfiedlerdrossel (*Turdus Pallasii* Cab. . . .), pp. 173, 174. (5) Der Gold- oder Kukukspecht (*Colaptes auratus* Swns. . . .), pp. 228-230, 240, 241, 251-253, 265, 266. (6) Der Scherentyrann, Scheren- oder Gabelschwanz (*Milvulus forficatus*, Swains. . . .), pp. 325, 326, 333–335. (7) Der blaugraue Fliegenfänger oder Mückenfänger (*Polioptila cærulea* Scl.), pp. 368-370, 380, 381, 393. (8) Der Satrap oder das Gelbkrongoldhähnchen (*Regulus satrapa*, Lichsts. . . .), pp. 435, 436. (9) Die Bergdrossel (*Oreoscoptes montanus* Brd. . . .), pp. 528-530.

189. *Rocky Mountains-Hüttensänger oder Steinschmätzer* (. . . *Sialia arctica* Swns.) *Eine Vogelstudie aus den Felsingebergen.* Von Fr. Trefz. *Ibid.*, p. 81.

General Notes.

Description of a Nest of the Water Ouzel.— The nest of the Water Ouzel (*Cinclus mexicanus*) is perhaps not so well known as to make the following description of one wholly uninteresting. The nest when found was in good condition, and had evidently been used the past season. It was built under a slightly overhanging wall of limestone, on a ledge projecting seven or eight inches from the wall, and about four feet above low-water mark, the deepest part of a swift mountain stream flowing directly beneath. The material of construction was a bright green moss, forming a rather conspicuous object for some distance along the opposite bank. The nest has a nearly spherical interior seven inches in diameter. The entrance is triangular, one side of the triangle forming the top and being three and one-half inches across and three inches above the lower angle. The most exposed side of the nest varies from three to four inches in thickness, the top and remainder being only an inch and a half through. At time of finding, the interior of the nest was perfectly clean, but outside, just below the opening, the rock was discolored for some distance by excrement of the birds. Side by side with this nest was an older one partially destroyed, and I fancied I could see traces of still another on the same ledge not far off. The birds had evidently lived in the locality for some time.—R. S. Williams, *Gold Run, Montana.*

The Short-billed Marsh Wren in New Hampshire.—On the 24th of August, 1881, while investigating the recesses of a fresh water marsh at Rye Beach, N. H., I found a colony of Short-billed Marsh Wrens (*Cistothorus stellaris*) in a small meadow about a mile from the sea. One bird was shot, and five or six others seen and heard.