ALEXANDER WILSON.

VI.—HIS NOMENCLATURE,

BY FRANK L. BURNS.

Dr. Coues has declared that science would lose little, but on the contrary, would gain much if every scrap of pre-Wilsonian writing about United States birds could be annihilated. It is true that foreign naturalists had been, for the most part, bigoted, misinformed or too credulous; and the few native writers unsystematic, lacking in initiative and realization of the importance of exactness. However, Wilson did not find systematic ornithology an utter chaos. Linnæus, the great compiler, and his editor Gmelin, had absorbed much from our earlier writers, particularly Catesby, and his Systema Naturæ provided the ground plan and skeleton, it remained to be consolidated, clothed, the gaps filled in; far too great a task in its entirety for the inexperience and brief period of Wilson, even had he the inclination for such work.

Wilson adopted, and with some exceptions, followed the system used by Dr. J. Latham in his Index Ornithologicus, and General Synopsis of Birds, which the Philadelphia library supplied him. For the use of M. Turton's version of Linnæus' Systema Naturæ, he was indebted to his friend Thomas Say. Mark Catesby's Natural History of Carolina, Florida and the Bahama Islands; George Edwards' work; Thomas Jefferson's Notes on the State of Virginia; William Bartram's Travels through North and South Carolina, Georgia, East and West Florida, the Cherokee Country, the extensive territories of the Muscogulges, or the Creek Confederacy, and the Country of the Choctaws; Jeremy Belknap's History of New Hampshire; S. Williams' Natural and Civil History of Vermont; and Benjamin Smith Barton's Fragments of Natural History of Pennsylvania; he found in Bartram's library, or elsewhere

Dr. Francis in describing Wilson's visit to New York, says that he seized the moments of leasure he had, in closely examining books on natural science, in different libraries to which he could obtain ready access The American Museum, which had been well fitted up, was however, his most gratifying resort. Scudder, the founder of this institute, was indeed a rough diamond, but few could surpass his enthusiasm in studying the volumes of nature, as he termed every object in natural history. Scudder remarked "I have many curiosities here, Mr. Wilson, but I myself am the greatest one in the collection."¹

In this manner. Wilson obtained the slender book knowledge of birds he possessed. At the time of his death, according to a statement of his executor, his shelves contained but one ornithological work, Thomas Berwick's History of British Birds! He was no closet naturalist. He was eager for the exact truth direct from nature. Ord, with some justice, complains: "In his specific definitions he is loose and unsystematic. He does not appear to have been convinced of the necessity of precision on this head; his essential and natural characters are not discriminated; and in some instances, he confounds generic and specific characters, which the laws of methodical science do not authorize. . . . That he was not ambitious of the honor of forming new genera, appears from the circumstance, that, although he found the system of Latham's needed reformation, yet he ventured to propose but one genus, the *Curvirostra*, the characters of which are so obvious, that one is astonished that so learned an ornithologist as Latham, should have contented himself with arranging the species appertaining to it with others, the conformation, of whose bills is so dissimilar. It may be necessary to state that Crossbills have been erected into a separate genus, under the denomination of *Crucirostra*, by an author whose works Wilson had no knowledge of: and I have reason to believe that even the generic appelation of *Curvirostra* had been anticipated, by a writer on the ornithology of the northern parts of Europe. Brisson limited his genus Loxia to the Crossbills, and this judicious restriction appears to be now sanctioned by all naturalists of authority."

¹ Obituary Notice of Alexander Wilson. The Port Folio, New Series, Vol. II, Sept. 1813,

In the spring of 1804, Wilson knew scarcely an American bird. He constantly appealed to Bartram to mark the names of his species under his drawings. Soon the multiplicity of current specific names purplexed and annoved him, and he writes to Bartram: "The more I read and reflect upon the subject, the more dissatisfied I am with the specific names which have been used by almost every writer. A name should, if possible, be expressive of some peculiarity in color, conformation, or habit; if it equally apply to two different species, it is certainly an improper one. Is migratorius an epithet peculiarly applicable to the robin? Is it not equally so to almost every species of *turdus* we have? Europea has been applied by Pennant to our large *sitta* or nuthatch, which is certainly a different species from the European, the latter being destitute of the black head, neck and shoulders of ours. Latham calls it *carolinensis*, but it is as much an inhabitant of Pennsylvania and New York as Carolina. The small redbellied sitta is called canadensis by Latham, a name equally objectionably with the other. Turdus minor seems also improper; in short I consider this part of the business as peculiarly perplexing; and I beg to have your opinion on the matter. particularly with respect to the birds I have mentioned, whether I shall hazard a new nomenclature, or, by copying, sanction what I do not approve." Fortunately for the already overburdened synonymy, Bartram's council was doubtless for a conservative course, and ever after Wilson labored diligently to adopt names sanctioned by some one or other of his predecessors, with due regard as to fitness, but little as to priority.

Wilson evidently endeavored to establish the identity of Bartram's species whenever possible, but referred to the List less and less as his own work progressed and his knowledge increased, doubtless realizing the hopelessness of the task, with nothing but the meagre description and the failing memory of his patron to assist him in the identification. On the other hand as Coues has stated, many birds which Wilson first fully discribed and figured, were named by Bartram, and several of the latter's designations were simply adopted by Wilson, who in relation to Bartram, is as the broader and clearer stream to its principal tributary affluent.¹ So far as the ornithological world is concerned, the originals are now mere literary curiosities, and are appended as a matter of history.

Bartram, 1791.	Wilson, and A. O. U. Check List.
1. Vultur atratus. the black vulture, or carriou crow.	Vultur atratus Wils.—Catharista atrata (Bartr.) until 1899, when it gave way to a later name—C. urubu (Vieill.) Bartram being eliminated.
2. F[alco] niger. the black hawk.	Falco niger Wils. Black Hawk. A synonym of Archibuteo la- gopus sancti-johannis (Gmel.) American Rough-legged Hawk.
3. Muscitapa nunciola. the pewit, or black-cap flycatcher.	Muscicapa nunciola Wils. Pewit Flycatcher. Synonym of Sayor- nis phæbe (Lath.) Phæbe.
4. <i>M. rapax</i> , the lesser pewit, or brown and greenish flycatcher.	Muscicapa rapax Wils, Wood Pewee. Synonym of Myiochanes vircus (Linn.)
5. Lucar lividus. the cat bird or chicken bird.	Turdus lividus Wils, Catbird, Synonym of Dumetella carolin- ensis (Linn.)
$\begin{array}{c} \textbf{6.} \textbf{Muscicapa \ cantatrix.} \\ \textbf{the little domestic flycatcher or} \left\{ \begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \end{array} \right.$	Muscicapa cantatrix Wils. White- eyed Flycatcher. Synonym of Virco griseus (Bodd.) White- eyed Virco.
7. Sturnus prædatorius the red-winged starling or $\operatorname{corn} \left\{ \begin{array}{l} \\ \\ \\ \\ \\ \\ \\ \\ \end{array} \right.$	Sturnus prædatorius Wils, A synonym of Agelaius phæniceus (Linn.) Red-winged Blackbird.
8. C[arduelus] pinus { the lesser goldfinch.	Fringilla pinus Wils. Pine Finch. Spinus pinus (Wils.) Pine Siskin.
9. $P[asser]$ palustris the reed sparrow.	Fringilla palustris Wils. Synonym of Mclospiza georgiana (Lath.) Swamp Sparrow.
10. $F[ringilla]$ rufa the red, or fox-colored ground $\left\{ \begin{array}{l} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Fringilla rufa Wils. Synonym of Passerella iliaca (Merr.) Fox Sparrow.
11. $M[otacilla]$ Caroliniana the great wren of Carolina.	Certhia carolinensis Wils. Synonym of Thryothorus ludoricanus (Lath.) Carolina Wren.

¹ Key to North American Birds,

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	Named only with reference to Bartram by Wilson Motacilla do- mestica Bartr. Synonym of Troglodytes aedon Vieill. House Wren.
13. M. palustris {	Certhia palustris Wils. Telmatodytes palustris (Wils.) Long-billed Marsh Wren.
14. Sitta varia the black-capped, red-bellied nut-{ hatch.	Silta varia Wils. Synonym of Sitta canadensis Linn. Red- breasted Nuthatch.
15. $T[urdus]$ melodes the wood thrush.	Turdus melodes Wils. A syn- onym of Turdus mustelinus Gmel. Wood Thrush.

Perhaps, Bartram's N[umenius] pectore rufo, or Tringa rufa, may have suggested Wilson's Tringa rufa Red-breasted Sandpiper; and Ardea viriscens minor, his Ardea minor Bittern; though the species are certainly not the same. Wilson failed to make use of P[asser] agrestis, the little field sparrow, though perhaps C[ardueles] pusilus, the least finch, may have suggested his Spizella pusilla for the Field Sparrow; nor did he adopt Bartram's M[otacilla] sylvicola, the little red-eye'd flycatcher for that species, but transferred the specific name to the Yellow-throated Vireo; and likewise P[arus] viridis guttere nigro, the green black-throated flycatcher, to Hirundo viridis, White-bellied Swallow. Fringilla rufa Bartr. was changed to F. ferruginea and marked new in his Catalogue, Vol. VI.

Bartram would serve as an ideal patron saint for a bird protective association. He was exceedingly averse to killing anything, and writes "as long as I can get any other necessary food, I shall prefer their seraphic music in the ethereal skies, and my eyes and understanding gratified in observing their economy and social communities, in the expansive green savannas of Florida." He would not kill the deadly diamondbacked rattlesnake, if it was possible to avoid it, because at the beginning of his career as a botanist, a mountain rattler had refused to strike when he had mistaken it for a curious bit of fungus. However, accidental specimens described in the field are not always satisfactory, and sight diagnoses

seldom accurate: therefore it is small wonder he erred re-His nomenclature is a mixture of Linnæus, Edpeatedly. wards, Catesby and his own. Unlike Wilson, he seemed never at a loss for a name, and if he had more than one occasion to refer to a species, he seldom repeated the name he had given it, but produced another. Hence we have Colymbus colubrinus et cauda elongata, the snake bird of Florida= Anhinga anhinga, Anhinga; Melcagris Americanus et occidentalis=M. gallopovo merriami, Merriam's Turkey; Falco aquilinus et major cauda ferregineo, the great eagle hawk= Buteo borealis, Red-tailed Hawk; F. regulis et maximus, the great gray eagle=Haliæetus leucocephalus. Bald Eagle; Strix acclamator et various, the hooting owl=Syrium varium, Barred Owl: *Caprimulgus lucifugus et rufus*, the great bull bat or chuck wills widow.=Antrostomus carolinensis. Chuckwills-widow: Garrulis australis et Motacilla trochilus=Icteria virens, Yellow-breasted Chat; Motacilla palustris et regulus atrofuscus minor, or marsh wren=Telmatodytes palustris, Long-billed Marsh Wren: Turdus melodes et minor=Turdus mustelinus, Wood Thrush; and perhaps others.

Not only Wilson, but Barton, Vieillot and Audubon quarried in the ruins of his nomenclature. His list of 215 nominal species, are by no means all identifiable. He did not understand the various changes of plumage some of our birds are subject to, in one or more instances differentiated the sexes of a species, and the confusion was not lessened by the more than occasional employment of established technical terms not applicable to the species under consideration. According to Coues about half are new, and subtracting a number unquestionably derived from other sources, though misapplied, and repetition or multiplication through ignorance of variation in plumage, the number is still large and contains several unknown to Wilson. It is also evident that some one must have imposed upon "Puc Puggy" (the Flower Hunter), as he was known to the Seminoles, in the instance of the so-called Vultur sacra, the painted or whitetailed vulture, which he tells us fed upon roasted lizards, snakes and frogs, therefore dependent upon the occasional

firing of the Florida savannas by lightning or the Indians, It is now considered a mythical species. Dr. Allen suggesting that it originated from some facts known to Bartram in connection with the Bald Eagle and the Caracara becoming mixed in his mind with some of his ideas respecting the King Vulture of the American tropics. For over a quarter of a century, Dr. Coues fought for the recognition of some twenty of Bartram's names, but aside from his polynomial tendencies, so many of his species were impossible of positive identification, it must have been a relief to have the bird solons finally decide adversely and eliminate Bartram entirely.

Barton attempted a concordance of Bartram's list in his Fragments of Natural History, 1799, with no very great success. It is full of errors and conjectures in respect to the identity of Bartram's species. He was, however, a strict binomialist, and receives recognition wherever he has properly describéd a species. From him Wilson has undoubtedly taken his Fringilla melodia=Melospiza melodia. Barton places it with the species known to breed in Pennsylvania, and also states: "In mild winters, this bird continues in Pennsylvania, associating with the Snowbirds. Does not appear to be described." Procrastination and lack of energy most probably robbed Barton of the title of Father of American Ornithology. His lamentable lack of concentration drew forth the rather contemptuous observations from Wilson in a letter to F. A. Michaux, the French naturalist; June 6, 1812; " Dr. Barton has not yet published his General Zoology, which he has been announcing, from time to time, for so many years. It is much easier to say these things than to do them." Ord states that after the work was ten years in the press, it had advanced no further than fifty-six pages in octavo, at the death of the author. "The printed sheets I have read, not only with satisfaction, but instruction; and cannot forbear expressing my regret that an undertaking, which Dr. Barton certainly knew how to perform, and to which his learning was adequate, should have been suffered to perish in embryo."

Wilson was not well versed in Latin, in fact there are

many who considered him a very unlearned man, because he obtained most of his knowledge direct from nature. Herein lies his success. The book knowledge of his predecessors did naught but deepen the obscurities surrounding the species they sought to elucidate. The conviction that here, at last, was a man who could write plainly and convincingly, from intimate personal knowledge, did more to dispel the mysteries of the past than all the high-sounding Latin names, phrases and references; and the appearance of his work marked a new era, glorious to American Ornithology. Wilson is accredited with the following species, which he figured, described and named.

- WILSON'S AMERICAN ORNITHOLOGY.
 - 1. Anas ralisineria Canvas-back Duck
- 2. Tringa solitaria Solitary Sandpiper
- 3. Falco misisippiensis Mississippi Kite
- 4. Falco velox Sharp-shinned Hawk
- 5. Falco atricapillus Ash-colored or Black-cap Hawk
- 6. Cuculus crythropthalma Black-billed Cuckoo
- 7. Caprimulgus vociferus Whip-poor-will
- 8. Corvus ossifragus Fish Crow
- 9. Corvus columbianus Clark's Crow
- 10. Fringilla pinus Pine Finch.
- 11. Fringilla savanna Savannah Sparrow
- 12. Fringilla maritima Seaside Finch
- 13. Fringilla pusilla Field Sparrow
- 14. Fringilla melodia Song Sparrow
- 15. Tanagra ludiviciana Louisana Tanager
- 16. Muscicapa solitaria Solitary Flycatcher

- A. O. U. CHECK LIST.
- = Marila vallisneria (Wils.) Canvasback.
- = Helodromas solitarius (Wils.) Solitary Sandpiper.
- = Ictinia mississippiensis Mississippi Kite. (Wils.)
- = Accipiter velox.Sharp-shinned Hawk.
- $= Astur \ atricapillus \ (Wils.)$
- American Goshawk.
- = Coccyzus erythrophthalmus
- Black-billed Cuckoo. (Wils.) = Antrostomus vociferus (Wils.)
- Whip-poor-will.
- = Corvus ossifragus (Wils.) Fish Crow.
- = Nucifraga columbiana (Wils.) Clark's Nutcracker.
- \equiv Spinus pinus (Wils.) Pine Siskin.
- = Passerculus sandwichensis savanna (Wils.) Savannah Sparrow.
- = Passcrherbulus maritimusSeaside Finch (Wils.)
- = Spizella pusilla (Wils.) Field Sparrow.
- = Melospiza melodia (Wils.) Song Sparrow.
- $= \frac{Piranga \ ludiviciana}{Western \ Tanager.}$ (Wils.)
- = Vireo solitarius (Wils.) Blue-headed Vireo.

- 17. Sylvia rubricapilla Nashville Warbler
- 18. Sylvia peregrina Tennessee Warbler
- 19. Sylvia magnolia Black and Yellow Warbler
- 20. Sylvia cerulea Cerulean Warbler
- 21. Sylvia castania Bay-breasted Warbler
- 22. Sylvia formosa Kentucky Warbler
- 23. Sylvia agilis Connecticut Warbler
- 24. Sylvia philadelphia Mourning Warbler
- 25. Muscicapa pusillo Green black-capt Flycatcher
- 26. Certhia palustris Marsh Wren

- = Vermivora rubricapilla Nashville Warbler. (Wils.)
- = Vermivora peregrina (Wils.) Tennessee Warbler.
- = Dendroica magnolia (Wils.) Magnolia Warbler.
- $= Dcndroica \ carulea \ (Wils.)$ Cerulean Warbler.
- *= Dendroica castanea* (Wils.) Bay-breasted Warbler.
- = Oporonis formosa (Wils.) Kentucky Warbler.
- = Oporornis formosa (Wils.) Connecticut Warbler.
- = Oporornis philadelphia (Wils.) Mourning Warbler.
- = Wilsonia pusilla (Wils.) Wilson's Warbler.
- *Telmatodytes palustris* (Wils.) Long-billed Marsh Wren.

One more species, Charadrius wilsonia = Ochthodromus wilsonia, Wilson's Plover, was figured by Wilson, but described and named by Ord. He also figured Rallus elegans Aud., King Rail, confusing it with R. crepitans, Clapper Rail; likewise Passerculus princeps Mayn. Ipswich Sparrow,¹ for a male P. sandwichensis savanna, Savannah Sparrow; and Turdus ustulatus swainsonii (Cab.) Olive-backed Thrush for T. guttata pallasii Hermit Thrush; though in the latter instance part of the text refers to the nesting of the Olivebacked undoubtedly, the nest and eggs are closely described, perhaps for the first time; the locality however is erroneous, Mississippi being so far south of its breeding range.

Wilson found the construction of specific terms so distasteful that he often misapplied old appellations, thereby losing the honor of naming several species he had discovered, described and figured, through preoccupation of the names.

WILSON.

- 1. Ardea ludoviciana Louisiana Heron
- 2. Phalaropus lobata Brown Phalarope
- 3. Falco pennsylvanicus Broad-winged Hawk
- A. O. U. CHECK LIST. = Hydranassa tricolor ruficollis Louisiana Heron. (Gosse),
- = Steganopus tricolor (Vieill.) Wilson's Phalarope.
- = Buteo platypterus (Vieill.) Broad-winged Hawk.

¹Stone, Alexander Wilson and the Ipswich Sparrow, Osprey, II. 1898, p. 117.

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- 4. Picus torquatus Lewis's Woodpecker
- 5. Muscicapa querula Small Green, Crested Flycatcher
- 6. Curvirostra americana American Crossbill
- 7. Fringilla passerina Yellow-winged Sparrow.
- 8. Sylvia pinus Pine-creeping Warbler
- 9. Sylvia petechca Yellow Red-poll Warbler
- 10. Musciapa minuta Small-headed Flycatcher
- 11. Turdus mustelinus Tawney Thrush

12. Turdus solitarius Hermit Thrush

- = Asyndesmus lewisi (Riley). Lewis's Woodpecker.
- = Empidonax virescens (Vieill.) Green-crested Flycatcher.
- \pm Loxia curvirostra minor American Crossbill. (Brehm).
- = Ammodramus savannarum australis Maynard. Grasshopper Sparrow.
- $\pm Dcndroica vigorsii$ (Aud.) Pine Warbler,
- = Dendroica palmarum hypochrysca (Ridg.) Yellow Palm Warbler.
- = Sylvania microcephala (Ridg.) Small-headed Warbler.
- = Turdus fuscescens Steph.
- Wilson's Thrush. Veery
- = Turdus guttatus pallasii Hermit Thrush. (Cab).

Laboring under the unusual disadvantage of lack of reference works and ignorant of the existence of such important productions as Vieillot's, for instance; Wilson increased the synonymy materially by renaming many species which were not new. The following are all antedated.

WILSON. 1. *Sterna aranea*, 1814 Marsh Tern

- 2. Sturna plumbea, 1813 Short-tailed Tern
- 3. Anas rubidus, 1814 Ruddy Duck
- 4. Tringa scmipalmata, 1813 Semipalmated Sandpiper
- 5. Tringa bartramia, 1813 Bartram's Sandpiper
- 6. Numenius longirostris, 1814 Long-billed Curlew
- 7. Picus querulus, 1810 Red-cockaded Woodpecker
- 8. *Hirundo viridis*, 1812 White-bellied Swallow
- 9. Larius carolinensis, 1811 Loggerhead Shrike

A. O. U. CHECK LIST. = Gelochelidon nilotica Gull-billed Tern. (Hasselq.) 1762 = Hydrochelidon nigra surinamensis (Gm.) 1788. Black Tern. <u> — Erismatura jamaicensis</u> Ruddy Duck. (Gm.) = Ereunetes pusillus (Linn.) Semipalmated Sandpiper, 1766. <u>— Bartramia longicauda</u> (Bechst.) 1812. Bartramian Sandpiper. = Numenius americanus, Bechst. Long-billed Curlew. 1812= Dryobates borcalis (Vieill.) Red-cockaded Woodpecker. 1807.

- = Iridoprocne bicolor (Vieill.) Tree Swallow. 1807.
- = Lanius ludovicianus, Linn, 1766.

- 10. Fringilla socialis, 1810 Chipping Sparrow
- 11. Fringilla palustris, 1811 Swamp Sparrow
- 12. Muscicapa melodia, 1812 Warbling Flycatcher
- 13. Muscicapa sylvicola, 1808 Yellow-throated Flycatcher
- 14. Muscicapa cantatrix, 1810 White-eyed Flycatcher
- 15. Sylvia maritima, 1812 Cape May Warbler
- 16. *Sylvia minuta* 1811 Prairie Warbler
- 17. Turdus aquaticus, 1811 Water Thrush
- 18. Motacilla domestica, 1808 House Wren

Loggerhead Shrike.

- = Spizella passerina (Bechst.) Chipping Sparrow. 1798.
- = Melospiza georgiana (Lath.) Swamp Sparrow. 1790.
- = Vireosylvia gilva (Veill.) Warbling Vireo. 1807.
- = Lanivireo flavifrons (Vieill.) Yellow-throated Vireo. 1807.
- = Vireo griseus (Bodd.) 1783. White-eyed Vireo. 1788.
- = Dendroica tigrina (Gmel.) Cape May Warbler. 1788.
- = Dendroica discolor (Vieill.) Prairie Warbler. 1807
- = Seiurus noveboracensis Water-Thrush. (Gmel.) 1788.
- $= \frac{Troglodytes \ aedon \ (Vieill.)}{House \ Wren.}$ 1807

One of Wilson's Scotch biographers has attempted to prove that he was well acquainted with the British ornis before emigrating to America. This cannot be so, or he would have differentiated some of the many species and subspecies he pronounced identical with those of the Old World. America produced no ornithologist until the time of John Cassin, who was equally acquainted with the birds of both hemispheres; or in the restricted sense which might apply to Wilson were his biographer correct, before the time of Bonaparte. Yet had Wilson taken to heart the patriotic belief of Thomas Jefferson, imparted to him in a letter of April 7, 1805, he could not have gone so far wrong but that he would have increased his own record for new species, or rather new names, by one-half. Jefferson said: "I am of the opinion there is not in our continent a single bird or quadruped which is not sufficiently unlike all the members of its family there to be considered as specifically different." Those figured and described with the supposition that they were identical with the Old World species, equal in number the distinctively American species accredited to his name. The references to European writers are of course misapplied. MUT CON

	WILSON.	A, U, U, UHEUK LIST.	
1.	Sterna minuta Linn.	= Sterna antillarum (Less.)	
	Lesser Tern	Least Tern. 18	47

WILSON.

- 2. Procellaria pelagica Linn. Stormy Petrel
- 3. Mergus merganser Linn. Goosander
- 4. Anas ferina Linn. Red-headed Duck
- 5. Anas clangula Linn. Golden Eye
- 6. Anas mollissima Linn. Eider Duck
- 7. Anas niger Linn. Scoter Duck
- 8. Anas fusca Linn. Velvet Duck
- 9. Scalopax gallinago Linn. Snipe.
- 10. Tringa pusilla Linn. Little Sandpiper
- 11. Tringa alpina Linn. Red-backed Sandpiper
- 12. Tringa hiaticula (Lath.) Ring Plover
- 13. Tringa hiaticula Lath. Ringed Plover
- 14. Hæmatopus ostralegus Gm. Pied Oystercatcher
- 15. Falco peregrinus Gm. Great-footed Hawk
- 16. Strix flammca Linn. White, or Barn Owl
- 17. Strix otis Linn. Long-eared Owl
- 18. Corvus picus Linn. Magpie
- 19. Corvus corax Linn. Raven
- 20. Corvus corone Linn. Crow.
- 21. Sylvia troglodytes? Linn. Winter Wren
- 22. Certhia familiaris Linn. Brown Creeper
- 23. Sylvia regulus Linn. Golden-crowned Wren

A. O. U. CHECK LIST.

- = Oceanites oceanicus (Kuhl.) Wilson's Petrel. 1820
- = Merganser americanus (Cass.) American Merganser, 1853.
- $= Aythya \ americana \ (Eyton)$ Redhead. 1833
- = Clangula clangula americana, Faxton, 1885, American Golden-eve.
- = Somateria mollissima borcalis C. L. Brehm, 1830. Northern Eider,
- = 0 idemia americana (Sw. and Rich.) 1831.
 - American Scoter.
- = Oidemia deglandi, Bp. 1850. White-winged Scoter.
- = Gallingo delicata (Ord.) 1825. Wilson's Snipe.
- \pm Pisobia minutilla
 - (Vieill.) 1819. Least Sandpiper.
- = Pelidna alpina sakhalina (Vieill.) 1861. Red-backed Sandpiper.
- = *Æyialitis semipalmata* Bp. Semipalmated Plover. 1825.
- = *Ægialitis meloda* (Ord) 1824. Piping Plover.
- = Hamatopus palliatus Temm.American Oystercatcher, 1820
- = Falco peregrinus anatum Duck Hawk. (Bp.) 1838.
- = Aluco pratincola (Bp.) 1838. American Barn Owl.
- = Asio wilsonianus (Less.) 1831.
 - American Long-eared Owl.
- = Pica pica hudsonia (Sab.)
- American Magpie. 1823. = Corvus corax principalis.
- Western Raven. Ridgw. 1887 — Corvus brachurhunchos.
- C. L. Brehm, 1822. American Crow.
- = Nannus hiemalis (Vieill.) Winter Wren. 1819
- = Certhia familiaris americana Brown Creeper, Bp. 1838.
- = Regulus satrapa Licht 1823. Golden-crowned Kinglet.

The following would have been antedated even had Wilson

separated them from the Old World species, which he did not do:

WILSON.	A. O. U. CHECK LIST.
1. Anas fuligula Linn.	== Amythya collaris (Donov.)
	1809.
Tufted Duck	Ring-necked Duck.
2. Anas hyperborea Pall.	= Chen hyperborea nivalis
	(Forst.) 1772.
Snow Goose	Greater Snow Goose.
3. Ardea nycticorax Linn.	\pm Nycticorax nycticorax navius
	(Bodd.) 1783.
Night Heron or Qua-bird	Black-crowned Night Heron.
4. Falco layopus Brunn,	🚍 Archibuteo lagopus sanctijo-
	hannis (Gm.) 1788.
Rough-legged Hawk	American Rough-legged Hawk.
5, Falco haliatus Briss,	\pm Pandion haliætus carolinensis
	Gm., 1788.
Fish Hawk, or Osprey	American Osprey.
6. <i>Strix hudsonia</i> Gm.	\pm Surnia ulula caparoch (Mull.)
Hawk Owl	American Hawk Owl. 1776
7. Lanius exubiter Linn.	\pm Lanius borealis Vieill., 1807.
Great American Shrike, or	Northern Shrike.
Butcherbird.	

The variations in plumage, particularly in the many species included in the families of *Scolopacida*, Snipes, Sandpipers, etc.; *Falconida*. Vultures, Hawks, Eagles, etc.; *Mniotiltida*, Wood Warblers; and *Turdida*, Thrushes, etc.; due to age, sex, season or dichromatism, were imperfectly understood at that time; therefore Wilson multiplied many of the species, not always without suspicion however.

WILSON. Tringa rufa Wils., Ad. Red-breasted Sandpiper	
<i>Tringa cinerea</i> Brunn Ash-colored Sandpiper	
Tringa alpina Linn. Red-backed Sandpiper Tringa cinclus Wils., Im.	_
The Purre	
Charadrius calidris Linn., Win- ter	
Sanderling Plover	
Charadrius rubidus Gm., Sum-	
mer	
Ruddy Plover	

A. O. U. CHECK LIST.

= Tringa canutus, Linn. Knot.

= Pelidna alpina sakhalina (Vieil.) Red-breasted Sandpiper.

= Calidris arenaria (Linn.) Sanderling.

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WILSON.

Falco vclox Wils., Ad. Sharp-shinned Hawk Falco pennsylvanicus Wils. Im. Slate-colored Hawk.

Falco borealis Gm. Ad. Red-tailed Hawk Falco leverianus Gm. Im. American Buzzard or Whitebreasted Hawk.

Falco hyemalis Gm. 1m. Winter Falcon Falco lineatus Gm. Ad. Red-shouldered Hawk

Falco lagopus Brunn. Rough-legged Falcon Falco niger Black Hawk

Falco leucocaphalus Briss. Ad. White-headed or Bald Eagle Falco ossifragus Gm. Im. Sea Eagle

Strix nævia Gm. Grey phase Mottled Owl Strix asio, Red phase Red Owl Sylvia canadensis Lath. Ad. Black-throated Blue Warbler Sylvia pusilla Wils. Im. Pine Swamp Warbler

Sylvia cerulea Wils, Ad. Cerulean Warbler Sylvia rara Wils, Female, Im. Blue-green Warbler

Sylvia castana Wils. Ad. Bay-breasted Warbler Sylvia autumnales Wils. Im. Autumnal Warbler

Sylvia blackburnia, Gm. Ad. Blackburnian Warbler Sylvia parus, Wils. Female and im. Henlock Warbler.

Sylvia virens Gmel. Ad. Black-throated Green Warbler Sylvia montana Wils. Im. Blue Mountain Warbler A. O. U. CHECK LIST.

= Accipiter velox (Wils.) Sharp-shinned Hawk.

= Buteo borcalis (Gm.) Red-tailed Hawk.

- = Buteo lineatus (Gm.) Red-shouldered Hawk.
- = Archibutco lagopus sanctijohannis (Gm.) American Rough-legged Hawk.
- $= \begin{array}{l} Haliaetus \ leucocephalus \\ Bald \ Eagle. \qquad (Linn.) \end{array}$

 $= \begin{array}{c} Otus \ asio \ (Linn.) \\ Screech \ Owl. \end{array}$

- = Dendroica carulescens (Gmel.) Black-throated Blue Warbler.
- *= Dendroica cerulea* (Wils.) Cerulean Warbler.
- *= Dendroica castanea* (Wils.) Bay-breasted Warbler.
- = *Dendroica fusca* (P. L. S. Muller.) Blackburnian Warbler.
- = Dendroica virens (Gmel.) Black-throated Green Warbler.

Wilson erroneously referred Numenius hudsonicus Lath. Hudsonian Curlew to Scolopax (Numenius) borealis Forst. Eskimo Curlew, an entirely different species; and an immature Aquila chrysaetos (Linn.) Golden Eagle, to Falco fulvus Linn. Ring-tail Eagle, which is a synonym of the former. In his index of the land birds, published in the preface of Volume VI, and covering the first seven volumes, Falco niger is recognized as a variety of F. lagopus (=Archibuteo lagopus sancti-johannis (Gmel.) American Rough-legged Hawk); also Loxia rosca Wils, corrected to Loxia (Zamclodia) ludivicana Linn. Rose-breasted Grosbeak.

It is also to be observed that Wilson repeatedly bestowed upon two separate species, knowing them to be distinct, the same title; but this occurred during the last two or three years of his life when he was nearly engulfed in work, worry and Had he lived, he would undoubtedly have corill health. rected many of his errors in the final index. Ord's attempts in this direction in a later "reprint" became confused with the original edition and caused some trouble later on. Charadrius hiaticula and Tringa hiaticula are undoubtedly homonyms, not only because they apply to distinct species of the same genus, but from the fact that both Bonaparte and Ord agree in the belief that *Tringa* was a typographical error.

WILSON.	A. O. U. CHECK LIST.
Charadrius hiaticula, Linn. Ringed Plover, pl. 37, fig. 3. v, 1812	= Ægialitis meloda (Ord.) Piping Plover.
Tringa hiaticula (Linn.) Ring Plover, pl. 59, fig. 3, viii, 1813	$= \mathcal{R}$ gialitis scmipalmata (Bp.) Semipalmated Plover.
Rallus virginianus, Linn. Rail, pl. 48, fig. 1, vi, 1812	= Prozana carolina (Linn.) Sora.
Rallus virginianus, Linn. Virginia Rail, pl. 62, fig. 1, vii, 1813	<i>= Rallus virginianus</i> , Linn. Virginia Rail.
Falco pennsylvanicus, Wils. Slate-colored Hawk, pl. 46, fig. 1, vi, 1812	= Accipiter velox (Wils.) Sharp-shinned Hawk.
Falco pennsylvanicus, Wils. Broad-winged Hawk, pl. 54, fig. 1, vi, 1812	<i>Buteo platypterus</i> (Vieill.) Broad-winged Hawk.
Sylvia pusilla	\pm Compsothlypis americana
Blue Yellow-backed Warbler, pl. 28, f. 3, iii, 1811	(Linn.) Parula Warbler.
Sylvia pusilla Pine Swamp Warbler, pl. 43, f.	<i>= Dendroica cærulescens</i> (Gmel.) Black-throated Blue Warbler.
4, v, 1813	Diack-infoated Dide warbler.

Wilson's Black-capped Warbler received the name of Muscicapa pusilla also; in fact pusilla, minuta, carolinensis, melodia, rufa, and a few others, seem to have been favorite specific terms with him. Sylvia minuta Prairie Warbler, was antedated by Dendroica discolor (Vieill.); and Muscicapa minuta (another Warbler presumably), preoccupied. Mislead by Bartram, the Snowbird (Slate-colored Juneo) which he called Fringilla nivalis, had been for a time confused with Emberiza (Plectrophanax) nivalis Snow Bunting, but the former was changed to F. hudsonia in the index, Vol. VI. Wilson's specific names were mainly descriptive, and for that reason it is regrettable that more of them are not available. Personal appellation though not a novelty, had not come into vogue until the time of Bonaparte and Audubon. One can admire the sturdy independence of Wilson in this respect. One species only, which he confidently thought new, did he name in honor of a friend and patron of science; Tringa bartramia Bartram's Sandpiper, and this proves to be antedated one year by Bechstein's T. longicauda; Lesson, however, in 1831 has placed it in a separate genus, which he calls Bartramia, hence we have after ali, Bartramia longicauda Bartramian Sandpiper.

Wilson's lack of enthusiasm in the construction and application of technical names, lead Bonaparte to publish his Observations on the Nomenclature of Wilson's Ornithology,¹ in which eight species are renamed, three in honor of the author, none of which stand; *Falco wilsoni* (=*Buteo platypterus*), *Sylvia wilsonii* (=*Sylvania* (?) *microcephala*)' and *Turdus wilsonii* (=*Turdus fuscescens*). Of this paper, which was read by the author in installments at the Academy meetings, Coues has commented as follows: "A critical commentary on 227 of Wilson's species, *scriatim*, and as such, one of the most notable and in some respects the most important of early American papers." And again: "This valuable critical commentary introduced a new feature—decided change in nomenclature from the sifting and rectification of

¹ Jour, Acad. Nat. Sci. Phila, III-V, 1824-25.

synonymy. It is here that questions of synonymy—today the bane and drudgery of the working naturalist—first acquire prominence in the history of our special subject. There had been very little of it before, and Wilson himself, the least 'bookish' of men, gave it scarcely any attention."²

In his paper Bonaparte remarks: "Wilson, though one of the most acute and accurate of Ornithologists, one who has rendered the greatest services to science, by describing, in his attactive style, the manners and habits of American birds, and who has corrected so many errors of former writers, has nevertheless, unavoidably committed some himself, principally of nomenclature, which are, in a great measure, attributable to a want of the necessary books and opportunities of comparison. So far, therefore, from being censurable for these errors, we are surprised that he has not committed more. . . . I do not consider myself censurable for the frequent repetition of the name of this great ornithologist, as applied to species in different genera; it is a tribute of respect which I conceive justly due to one who has done so much for the benefit of my favorite science."

It is scarcely within the province of a biographer to follow the tortuous channels of thought and research, whereby Bonaparte and Ord attempted the correction of Wilson's errors in nomenclature; nor is it surprising that so few of the terms as then constructed, are in use today. Wilson erroneously placed the Whooping Crane with the Heron; the Chimney Swift with the Swallow; the American Redstart, Hooded, Canadian, Black-capped and Small-headed Warblers, the Vireo and the Blue-gray Gnatcatcher, with the Flycatchers; the Bluebird, the Kinglets, House and Winter Wren, with the Wood Warblers; the Yellow-breasted Chat with the Manakins; the Black and White Warbler, Carolina and Long-billed Marsh Wrens, with the Creepers; and the Oven-bird and Water-thrush with the Thrushes. In most instances he followed his predecessors, or at least one of

² Bibliographical Appendix, Birds of the Colorado Valley, 1878, p. C08.

them, in error; *Pipra polyglotta*, however, was an unhappy classification exclusively his own, about on a par with some previous works, where the Chat has been variously placed with the Flycatchers, Tanagers or Chatterers. On the other hand he straightened out the tangle in which European writers had involved the two Eastern Orioles; Bonaparte has declared that no species of birds had occasioned so many errors, and so great a multiplication of nominal species. His knowledge of the Sparrows and Warblers was really wonderfully full for that time. Unquestionably, Dr. Shufeldt did not intend to create a wrong impression when he wrote: "In summing it up then, it will be seen that Wilson knew of but thirty species of birds that belong to the family Fringillida, while in our Check List of 1895 the same family is represented by no fewer than eighty-nine species and seventy-four subspecies—163 birds in all."¹ One of our best authorities has found that there are only thirty-six forms recognized today in the section of the country covered by Wilson.

According to Coues, Wilson gave faithful descriptions of about 280 species, and colored illustrations of most of them, -78 indicated as new according to his Bibliographical list; Ord calculated 278 species, following Wilson's catalogue, 56 being new; Bonaparte places the total number at 270 species; and Baird, 257 species, not including Melango gallopavo Wild Turkey, and Gracula barita Boat-tailed Grackle, mentioned in the index of volume vi. The whole number of birds figured is 320. Actual number of species both figured and described is 262, making a total of 268 species made known by their figure or description, or both; excluding the three species figured but not separately distinguished, 39 were new; and adding to this number the 23 species and subspecies which he probably described sufficiently to differentiate from the European, though he did not give them new names, gives a total of 62 newly described species and subspecies. When one realizes that Europe had been drawing

¹America Sparrows and Their Kin, Shooting and Fishing, XXI, 1897, pp. 307-308.

from the region of his researches for many years, it will be seen that this is a wonderful showing in comparison to the really small grand total; and more extraordinary still, all of his birds are identifiable at the present time, except a single species. His English names have always been popular, and the majority of them are very appropriate, acceptable with occasional modifications through all these years, without fixed rule or reason.

But the correct delineation of several hundred species of birds nor the exposition of a few score of nondescripts, do not begin to express the services of Alexander Wilson to American Ornithology. His work was far more than a mere descriptive and illustrated catalogue of the birds he had found. He ennobled science and literature without sacrificing that charming simplicity of expression which reached and educated the people as few works of like nature have done. Ornithology cannot begin to measure his services in creating the proper sentiment in this country. "No other work on American ornithology has been so much talked and written about as this; and the time for comment on its character is long gone by. The 'melancholy poet-naturalist' occupies a place as changeless as the hills, and wholly peculiar. He stands toward American ornithologists in a position corresponding somewhat to that which is occupied in England by White of Selbourne, in Germany by Bechstein, and I will add, among anglers by Izack Walton."1

In later complimentary honors, Wilson has not fared so badly. One genus, *Wilsonia* Bonaparte, was created in 1838, and has been recently revived. Of the thirteen or more specific terms named in honor of Wilson, two survive—*Ochthodromus wilsonia* (Ord) Wilson's Plover, and *Asio wilsonianus* (Lesson) American Long-eared Owl. In the vernacular names he has fared still better:—Wilson's Petral Oceanites oceanicus, Wilson's Phalarope Steganopus tricolor, Wilson's Snipe Gallinago delicata, Wilson's Warbler Wilsonia pusilla, and Wilson's Thrush Turdus fuscescens.

¹ Coues, Birds of Colorado Valley, p. 600,

Additional evidence of the thoroughness of the Ornithologist can be found in his constant reference in his work to carefully numbered specimens placed in Peale's museum. Without the facilities or inclination for personal hoarding, he had every right to suppose that the birds he looked upon as his types, would be carefully preserved for a practically indefinite period in the public museums of his adopted city or country; that they were not is neither creditable to Philadelphia or the country at large.