Osteologically, Molothrus and Pipilo are not so very unlike." While all this may be true, so far as the skeleton may afford a clue to affinities, other features, we are convinced, obviously point to a decidedly Icterine affinity, rather than Fringilline, for both Molothrus and Dolichonyx, particularly the texture and general character of the plumage, their musky Icterine odor, pose, carriage and habitus in general. These in themselves are but superficial indices and traits of character, so to speak, which point to an Icterine ancestry, and general Icterine structure. It should be further noted that some of the exotic species of Molothrus make a close approach to the genus Agelaius, and that Neospar, Curaus, and Leistes are not far removed.

Among the Oscines we should not, a priori, look for evidence in the skeleton to decide nice points in affinity so much as to other and more superficial clues to relationship. In further illustration of this general point is Dr. Shufeldt's conclusion that the true affinities of the Magpie are Corvine and not Garruline, although this bird may be, as Dr. Shufeldt puts its, "so far as its skeleton is concerned ... a Crow, pure and simple." While it is important to compare birds of allied groups in respect to minute osteological differences and resemblances, the results are obviously, as Dr. Shufeldt so strongly affirms, to be correlated with the general structure, and conclusions, respecting affinities, to be final, must rest on more than a single system of characters.

The plates give figures of skull and pelvis of Sturnella m. neglecta and Pica pica hudsonica, the pelvis of Corvus americanus, and the skull of Xanthocephalus xanthocephalus (two examples).—J. A. A.

Shufeldt on the Skeleton of the Carolina Rail.—Another recent paper by Dr. Shufeldt contains a detailed description of the osteology of *Porzana carolina*,\* with figures of the principal elements of the skeleton. The pelvis is found to possess many points in common with that of *Geococcyx*, each having a probosis and the same peculiar pattern of the pre-acetabular portion of the ilium. Various rather peculiar modifications of other skeletal elements are pointed out.—J. A. A.

Vernacular Ornithology.† — This is a wonderful world of checks, balances, compensations, and reactionary running-gear. For example, the A. O. U. Committee has upset all the technical names of birds that could thus hardly be dealt with, and Mr. Trumbull has set up all the vernacular names that could be treated understandingly. Thus ornithology fattens and flourishes, as on loaves and fishes; for has not our author wrought a veritable miracle; namely, the filling of a 'long-felt

<sup>\*</sup>Osteology of *Porzana carolina*. (The Carolina Rail.) By R. W. Shufeldt, M.D. C. M. Z. S. 8vo, pp. 16, with 7 cuts in the text. Reprinted from the 'Journal of Comparative Medicine and Surgery,' July, 1888.

<sup>†</sup> Names | and | Portraits of Birds | which interest gunners | with descriptions | In language understanded of the People | by Gurdon Trumbull | New Vork | Harper & Brothers, Franklin Square | 1888 | 1 vol. 8vo. pp. viii, 222.

want'? (Not that any one has actually felt that want until the void has been filled; but it existed, and only needed filling to be felt and grow by what it fed upon.) Even ornithologists, however hopelessly mired down in the mazes of their 'shoptalk,' as our irreverent friend terms their technical vocabulary, may find in this book much to their profit. Seeing that theirs is not the only language that is weighted with synonymatic woe, they may take heart again. Many of them have 'viewed with alarm,' as the politicians say, the great load of wordy rubbish that our science carries; the spectacle of a bird with half a dozen generic, a dozen specific names, and several dozen combinations of these two terms has a chastening effect upon the mind. But now, with risen spirits, we can 'point with pride,' like statesmen, to the synonymatic confusion worse confounded which our mother tongue offers to console us, if not to absolve us from our sins. For here we have a thousand and more names for three-score birds! Et tu Brute, Mr. Trumbull?

But to be serious, as befits the rich embarrassment with which the author endows us, let us examine this remarkable work. It treats all the gamebirds of Eastern North America—the natatorial, gallinaceous, limicoline and paludicole birds ordinarily pursued, for sport by "that helpless but interesting creature, 'the true sportsman,'" or for profit by "our gunners, a class of men who earn a livelihood by shooting birds." These we find to be sixty-one in number. They are first named in strict accord with the rules and regulations for such cases made and provided by the A. O. U. Committee, the dogmas of which deathless doers of deeds nomenclatural are accepted by Mr. Trumbull with orthodox humility. Then comes a brief description, in language 'understanded of the people,' together with a statement of habitat in each case, the range being usually drawn from the same fountain of infallibility whence the sacred scientific names issue: for in the beginning was the word, and the word was with the Committee. With these data comes a portrait in each case — a striking silhouette, or symphony in black and white, struck by the well-known hand of Mr. Edwin Sheppard, who has made better likenesses of more birds than any other American artist now living. Having thus marked down his bird, so to speak, Mr. Trumbull proceeds to bag his game with a wealth and ingenuity of device that excite our unbounded admiration. It is truly an infinite variety that neither age can stale nor custom wither -a bounteousness, a plenitude, a very plethora, the fulness whereof is exhaustless. Allah is said to be invoked by the pious Mussulman under ninety and nine aliases, and history but repeats itself in the myrionymy of the game birds of America. A thousand names, for three-score birds, by a single prophet!

The index occupies a little less than 11 pages, 3 columns to a page, over 50 names to a column. Were it solid, this would represent about 1881 names for the 61 birds; but some are entered twice or thrice, and some columns are not full. Making the very wide allowance of 881 names, there may be supposed to be at the least a thousand, or an average of about six teen vernacular names to every bird.

It is instructive as well as entertaining to analyze some of the cases, to see exactly how such a result is reached: for it is a lesson in the very genesis of language. The origin of the native names of birds is an illustration of the way names of any other things come to be. Grammar and science and such like have nothing to do with making speech; they talk about it when it has been made; they are the offspring, not the parents, of language—a fact in natural history which some grammarians might ponder to their advantage. Savages and other animals are the real masters of words,—of words which tyrannize over nobody but philologists—of words, which lexicographers fancy they use, when in fact the words are using them all the time, and sometimes very badly. We speak feelingly, being under dictionary bonds ourselves: but let us turn from this digression to the Ruddy Duck, for an example of what we mean.

Erismatura rubida was first called ruddy duck in the books by Wilson in 1814; Mr. Trumbull finds for it sixty-six vernacular names. Some of these, it is true, are mere variants or doublets of one another, like broadbill and broadbilled dipper or dapper or dopper; but at least forty of the lot are fairly separate and distinct designations developed from almost as many origins, etymologically speaking. They fall in several categories or series, in the examination of which it would appear that almost every personal peculiarity of the fowl, in points of size, shape, dress, manners and habits has been pitched upon for an epithet by somebody, somewhere. Thus, this bird is a blue-bill, a broad-bill, a hard-headed broadbill, a sleepy broadbill; it is a broad-billed dipper, and a mud-dipper, and a horseturd dipper-a dipper, a dapper, a dopper, unqualifiedly. It is a coot, a boobycoot, a bumblebee coot, a horseturd coot, a creek coot, a sleepy coot. It is a sleepyhead, a sleepy duck, a sleepy brother. It is a spoonbill and a butterball; a spoonbilled butterball, and a butterduck, butterbowl, butterscoot, blatherscoot, bladderscoot, and generally a blatherskite. It is a fool-duck, a deaf-duck, a daub-duck; a bull-neck, shot-pouch, stub-andtwist, steel-head, tough-head, hickory-head, and a regular hardhead. It is a bristle-tail, pin-tail, quill-tail, spinetail, stick-tail, stiff-tail, and a heavy-tailed duck altogether. It is a dunbird, dun-diver, ruddy diver, diptail diver; a brown diving teal, a saltwater teal, a goose-widgeon, a widgeon-coot, and absolutely a widgeon; likewise, a water-partridge; item, a leather-back and a paddywhack; it is hardtack and a light-wood knot; a dinkey and a dickey, a greaser, a paddy, a noddy, and a rook. All of these and other things too, is this worse than dodecasyllabified fowl - this Erismatura rubida, which, to crown all with a subtle pleasantry. Mr. Turnbull tells us is even known by its proper book name of ruddy duck among the market gunners and city sportsmen.

No one who is familiar with the bird can fail to see instantly some point about it which has been seized upon instinctively by popular apprehension. As the New York 'Nation' recently remarked, these names are such as any son of Adam out of Eden might have pitched upon, had he been set to the same task that our first parent is alleged to have had imposed upon him. The further we follow our agreeable author, the more impressed we are with the patness and transparent originality of these

popular designations. Like other nicknames and byewords they "just growed." Let us try once more, and take the case of the Scoters which are so common along our Atlantic Coast, confining ourselves to one point, the beak. This is all 'out of perspective,' so to speak, and fantastic in color decoration besides, so that it catches the eye at first sight. This vivid impression upon the thinking-cap of the natural man is instantly translated into speech, and from his tongue-telephone fly such winged words as skunk-bill, muscle-bill, plaster-bill, picture-bill, blossom-bill, butter-bill, butterboat-bill, hollow-bill, copper-bill, and broad-bill, morocco-jaw, goggle-nose, butternose, snuff-taker, and so on. And it goes without saying that the bill is not the only point about these birds that is available for like purposes.

We do not propose to import Mr. Trumbull's book bodily into 'The Auk,' for that would be to deprive our readers of the pleasure they will find out for themselves in handling this delightful accession to our shelves. Nor would we excite needless alarm: yet, which one of us, though pretty knowing in birds, can identify all the following names without our author's assistance? Alwar grim. assemblyman, badger, barren hen, beetle, blackjack, booby weakhorn, broady, brownie, bunty, caloo, chuckatuck cockawee, cowfrog, darcall, dunter, earl, fizzy, fute, granny, hound, humility, iron pots, jingler, krieker, looby, lord, lousybill maggot sniper mealybird, mommy, mosshead, mowyer, night-peck, noddy, old smoker, pelick, pike-tail, pilot, pishaug, pulldoo, quandy, quink, rodge, scoldenore, shrups, simp, skirl-crake, smee, smoker, snowl (it makes one creepy to think what a terrible thing a 'snowl' must be!), southerland, sparling fowl, split-tail, squam, stib, timber-doodle, triddler, tweezer, wamp, weaser, whiffler, velper.

Next after the scholarly, literary complexion of this book the thing we admire most is the author's care in sorting out the names and affixing them to the right bird. A living language is even more elusive and illusory than the dead speech of our technical treatises, if happily such acme of mirage be a natural possibility, and it must have taken a great deal of close work to arrange the synonymy and homonymy. It is not always a case of sixteen names per bird: it is sometimes a matter of sixteen birds of one name. It is the very gist of dialecticism that it shall be pliable. vielding to every impress of geographical environment. A word is a very different thing when twanged through the nose of a Down-east fisherman and smacked by the lips of a Southern darkey; besides which orthoepic changes, different sets of people think differently about the same thing, and consequently call it differently. So it may be said of our game birds, with slight paraphrase of a saying of one of the friends of our youth, "nomen non animum mutunt, qui trans mare volant. In every case, Mr. Trumbull has been at pains to pin the name down to its proper habitat; a matter, the importance of which to his success in this venture he has evidently appreciated. And not only this: for, since time as well as space has to be taken into the total reckoning, words that are at their full vigor of life are properly distinguished from those that are dead or dying of old age, and those that are just coming into existence.

The serious defects and very numerous faults of this treatise are those which we have not discovered and therefore decline to mention. The wingshooter does not live who never made a miss. On the contrary, plenty of critics continue in existence who do not find what they want in books because they do not know what they ought to want. Our advice to all such, were it asked, would be, to waste none of their precious time in finding fault with anybody until after they have done better themselves. This practice would greatly promote industry among critics, and might convert some of them into authors in due course of time, besides sparing us much illiterate literature. Those who like to sample a bushel of wheat by the grain of chaff which may reward their diligent search will continue to amuse themselves in this manner until they discover the first rudiments of sound book-reviewing. It is a young rooster that would rather put on than take off his gaffs.—E. C.

Allen on the Emargination of the Primaries. - A recent episode, not lacking interest to one with any sense of humor, has recalled attention to the mechanism of the wing and the mechanics of the flight of birds, and has had one useful end in explaining the purpose of the emargination of the primaries in Hawks and many other birds. It seems that Professor W. P. Trowbridge, of New York, eminent in many walks in science, conceived the idea, groundless in point of fact, that the emargination served to 'interlock' the primaries under some circumstances; and in this novel notion he received the support of Professor J. S. Newberry, the distinguished geologist and naturalist. The subject was laid before the New York Academy of Sciences, at a meeting held Oct. 17, 1887,\* and resumed Dec. 12, 1887, when considerable discussion was elicited, and at the same time papers appeared elsewhere. † At the meeting of the Academy of Dec. 19, 1887, the subject was resumed, eliciting a warm discussion among the members present.§ The ornithologists, without exception, declined to consider the interlocking theory in any other light than that of a mistake. The outcome of the affair, which has closed the subject to date, was an address by Professor J. A. Allen, before the Academy, Jan. 9,

<sup>\*</sup> Trowbridge, W. P. "A discovery by C. C. Trowbridge regarding the purpose of emargination in the primary wing-feathers of certain birds." Trans. N. Y. Acad. Sci. VII, Oct.-Nov. 1887, pp. 19-21.

<sup>†</sup> Trowbridge, W. P., Newberry, J. S., and others. "The Mechanism of Flight in Soaring Birds." Trans. N. Y. Acad. Sci., VII, Dec. 1887-Mar. 1888, pp. 75-78.

<sup>!</sup> Newbury, J. S., "The Flight of Birds," Science, Dec. 16, 1887, p. 290.

Coues, E., "The Mechanism of the Flight of Birds," Science, Dec. 30, 1887.

Newberry, J. S., "The Flight of Birds," Science, Jan. 6, 1888, pp. 9, 10, and Trowbridge, W. P., Id., ibid., p. 10.

<sup>§&</sup>quot; Discussion of the Mechanics of Bird Flight," by Professors Trowbridge, Newberry Allen, Messrs. D. G. Elliot, G. B. Sennett, E. E. Thompson, and N. L. Britton, and notes on the "Soaring of Birds," by Dr. J. B. Holder. Trans. N. Y. Acad. Sci., Dec. 1887-Mar. 1888, pp. 80-87.