not only to thresh out the whole question, but, in the event, as seems probable, of an entirely adverse verdict being recorded against the bird, to specify definite methods for keeping its numbers within proper bounds." He adds, however, that "there seems to be hardly a crop that is grown that is not said to suffer more or less at some time of the year from the depredations of this bird."

The illustration of this excellent work comprise a large folding map of the County of Kent, colored to indicate altitude for each hundred feet from sea level to 500 feet; half-tone plates of the typical haunts of various species of birds, and of some of the rarer species; also facsimile reproductions of the original plates of the Dartford Warbler (from Pennant's 'Zoology,' 1776), the Cream-colored Courser (Latham's 'Synopsis,' 1785), the Kentish Plover (Lewin's 'Birds of Great Britain'), and the Sandwich Tern (Boys's 'History of Sandwich,' 1784), all drawn from specimens killed in Kent, and hence of special local interest.— J. A. A.

J. Grinnell on New North American Birds. — Two new North American Cowbirds marked the closing days of 1909, Mr. Grinnell, in a paper 1 bearing date December 31, 1909, describing a new form based on a series of eleven males from Humboldt County, Nevada, under the name Molothrus ater artemisia, while Dr. L. B. Bishop, in 'The Auk' for January, 1910 (mailed January 3), described as new a form from Saskatchewan as Molothrus ater dwighti. These two forms are both characterized as larger than the two previously recognized forms of this species (ater ater and ater obscurus), with a slenderer bill, but as not presenting any color differences. Whether the two new forms are separable from each other is not very clearly evident from the descriptions, since the measurements in the one case are given in millimeters and in the other in inches, rendering the reduction of the one system to the other necessary before a comparison can be made. This is unfortunate and should not be countenanced, especially since the metric system is now almost universally the standard in all scientific investigations except in ornithology, where the tendency in some instances is to adhere to an obsolete method for the convenience of the few who are willing to allow temporary inconvenience to outweigh and retard the adoption of a new but generally approved standard.

Mr. Grinnell contends that his new Great Basin form is derived from southern or Mexican stock — from obscurus rather than from ater — and we believe that few who have given consideration to parallel cases will disagree with him. We are surprised, however, at his attitude respecting the nomenclature of these and similarly allied forms in other groups. He says (in a footnote to p. 277): "As to the nomenclatural treatment of the

¹ A New Cowbird of the Genus *Molothrus*, with a note on the probable Genetic Relationships of the North American Forms. By Joseph Grinnell. University of California Publ., Zoöl., Vol. V, No. 5, pp. 275–281, 1 text figure. December 31, 1909.

three forms here distinguished, I am reluctantly following recent precedent....I have no evidence whatever that the three forms, ater, artemisia, and obscurus, intergrade continuously and geographically between each other. In other words their distinctness is specific on any criterion excepting those of relatively close similarity in gross appearance, and individual overlapping in separate characters." He appears to forget, for the time being, that while the Cowbird group has a continuous, though over some unfavorable areas a sparse, distribution over the greater part of the North American continent, his "lack of evidence" is purely negative evidence; and that forty to fifty years ago scores, indeed hundreds, of vertebrate forms were ranked as unquestionable species which have since been found to intergrade as additional material came to light from intervening localities, and their subspecific status and complete intergradation with other forms demonstrated. When it comes to naming such slightly differentiated forms as these Cowbirds, surely the probabilities in the case, as established by experience, should receive some consideration, and be allowed at least as much weight as the absence of contrary evidence.

We are even more surprised that Mr. Grinnell should advocate abandoning the use of trinomials, on account of the "tendency among ornithologists nowadays to 'reduce' all congeneric forms in plastic groups to subspecific status." It may be admitted that here and there may be found an ornithologist who is given to excessive 'lumping,' but in general the attitude is reasonably conservative, and the excessive lumpers are not the standard bearers. Yet Mr. Grinnell takes the matter very seriously, continuing: "Indeed it might even be urged with reason that trinomials have outlived their usefulness, and that a pure binomial system, as consistently followed by Sharpe in his 'Handlist of Birds,' is adequate and decidedly less cumbersome." On this point we have already expressed ourselves with some emphasis in two reviews of this same 'Handlist,' 1 the gist of which is that such uniform treatment of all forms, whether known to intergrade or not, is grossly misleading, giving no clue to their real or 'genetic' relationships or to their relative distinctness and degree of differentiation. Sharpe, for instance, who is here cited as the model after whom we should pattern, recognizes hosts of forms as full species that really have no claim whatever to recognition in nomenclature, including forms that have even been abandoned by their proposers, and others condemned by the consensus of experts. If he had in each case, by the use of trinomials, given them the value currently assigned them, even the unwary layman would have some proper conception of their value and relationships, but now all have to him the same value and only the expert can make the proper discrimination under this uniform and "consistent" binomial method.

Mr. Grinnell has also described two new forms of the Bewick Wren group ²

¹ Auk, XXVII, Jan. 1910, pp. 93-95 (cf. p. 95); Science, N. S., XXXI, pp. 265-267, February 18, 1910.

² Two heretofore unnamed Wrens of the Genus *Thryomanes*. By Joseph Grinnell. University of California Publ., Zoology, Vol. V, No. 8, pp. 307-309. February 21, 1910.

from California, and a new interior form of the Savannah Sparrow.¹ The latter is based, like the new form of Cowbird, on specimens from Humboldt County, Nevada, and named Passerculus sandvicensis nevadensis. It differs from P. s. alaudinus, its presumably nearest relative, in its extreme pale coloration. The type of alaudinus is stated to have come from California, and as the swarms of Savannah Sparrows that visit the coast region of California belong to the dark form, Mr. Grinnell has properly given the new name to the lighter colored interior form. He quotes Mr. Brewster as having previously called attention to the composite nature of the group of Savannah Sparrows hitherto referred to alaudinus.

With the addition of Mr. Grinnell's two new forms of the *Thryomanes bewicki* group, he claims to be "able clearly to distinguish...eight geographic races within the limits of the State of California, occupying as many separate areas of differentiation." These eight forms are here listed, with their ranges. The new forms are *T. b. marinensis*, occupying "the humid coast belt north of the Golden Gate and San Francisco Bay, in Marin and Sonoma counties," and *T. b. catalinæ*, from Santa Catalina Island, southern California, differentiated from the adjoining mainland form *charienturus*, to which these island specimens were formerly referred. The former is separated from *spilurus*, as formerly circumscribed.

As the difference between "lumpers," "splitters," and "conservatives" is no doubt largely temperamental, we shall doubtless have all three classes always with us. But the downfall of trinomialism, if it ever comes, will be through its abuse, due to the temptation and facility it offers for ultra splitting. There are local differences that may be distinguishable to an expert that are often too trivial and too uncertain and insignificant to warrant recognition in nomenclature, since the added burden gives no commensurate return. The general facts may be recognized and recorded, and their significance noted, as is repeatedly done by good specialist who are not open to the charge of being lumpers. Mammals, for example, are far more plastic than birds, so much so that it is found necessary to pass over minor and extremely local variants in order not to reduce nomenclature, in the matter of subspecies, to a burden of names, a considerable portion of which would have not only little significance but would belittle the real function of nomenclature.— J. A. A.

Beebe on the Tail Feathers of the Motmots.²— It has long been known that the characteristic racket-shape of the central rectrices of certain species of Motmots is produced by the action of the bird itself in picking off the barbs from the subterminal portion of the feathers. That this act was performed by the bird purposely appeared so obvious that it has

¹ The Savannah Sparrow of the Great Basin. By Joseph Grinnell. *Ibid.*, pp. 311-316. February 21, 1910.

² Racket Formation in the Tail-Feathers of the Motmots. By C. William Beebe, Curator of Birds. Zoologica: Scien. Contr. New York Zool. Soc., Vol. I, pp. 141-149, figs. 43-47. January 15, 1910.