XXXV.—Critical Notes on the Zoo-geographical Relations of the Avifauna of Rio Grande do Sul. By H. von JHERING, C.M.Z.S.

ONE of the difficulties in the discussion of the avifauna of Southern Brazil, and especially of that of Rio Grande do Sul, arises from the scarcity of materials, and another from various errors in the indications of the habitats of the birds themselves. Two such erroneous indications, for example, occur in the paper published by Count Berlepsch and the writer on the Ornis of Taquara do Mundo Novo^{*}. Trogon aurantius, determined by Count Berlepsch on an incomplete and only partially-coloured figure, is not a species of Rio Grande do Sul, being represented in São Paulo and Rio Grande do Sul by T. surucura, of which it seems to be the northern form. Again, Rhamphastos ariel does not occur in Rio Grande do Sul, and was indicated by me, by mistake, instead of R. toco.

It seems to me that the work of Burmeister ('Syst. Ueber. d. Thiere Brasiliens') also mentions some species as found in Rio Grande do Sul which do not occur in the State in question. Pelzeln says that in the Museum of Lisbon there exists a specimen of *Ibycter ater* from Rio Grande do Sul. But this is an Amazonian species, which has never been found by other observers in Southern Brazil.

Many naturalists have the habit of writing "Rio Grande" when speaking about Rio Grande do Sul; we have, however, not only two States of this name in Brazil, but also in many other States places of the same name. Thus, in the State of São Paulo, "Rio Grande" is a station on the São Paulo and Santos Railway; and the São Paulo branch of the Paraná river is also called "Rio Grande." There are likewise many places in Brazil bearing the name São Paulo. It is quite easy for misunderstandings to arise in this way, and some of the wrong indications above alluded to have probably had such an origin.

• "Die Vögel der Umgegend von Taquara do Mundo Novo, Prov. Rio Grande do Sul," Zeitschr. f. d. gesammte Ornithol. 1855, p. 97. But there are other incorrect statements which are very pernicious, and which must have some other explanation. The Bird-Catalogues of the British Museum enumerate a great number of species stated to have been obtained at "Pelotas, Rio Grande do Sul," by "Joyner." Pelotas is a city of Rio Grande do Sul, in 32° S. lat., and I affirm that the greater number of the birds thus indicated cannot have been really collected at Pelotas.

I have devoted more than twelve years to the study of the avifauna of the State of Rio Grande do Sul. Although I have never lived at Pelotas, I have obtained many birds from there. I have, moreover, resided successively at Pedras Brancas, Rio Grande do Sul, São Lourenço, Colonia of São Lourenço, and Barra do Rio Camaquam, and have thus passed nearly ten years in different localities situated a short distance from Pelotas.

It may also be stated that at Pelotas I have examined the beautiful collection of birds of Mr. Carlos Ritter, who, although not a trained zoologist, is an ardent collector and has a perfect knowledge of the avifauna of this country. He has told me that he never saw such species as *Dacnis* cayana, Chrysotis æstiva, and others at Pelotas. His investigations on the personality of "Joyner" have been without result, as have those of the British Consulate at Pelotas.

Among the species stated to have been received at the British Museum from "Pelotas," there are some which occur in the State of Rio Grande do Sul, but never at Pelotas, as, for example, *Ara maracana* Vieill.

If we set aside such species as occur in the northern part of the State, we have yet remaining the following 33 species, stated to have been obtained at "Pelotas, Rio Grande do Sul," by "Joyner," but which have not been recorded from Rio Grande do Sul by any other observer. Of these probably a great number do not occur at all in this State, and if so, certainly not in the southern part of it, at Pelotas. These are :--

I have never succeeded in obtaining Dacnis cayana in Rio Grande do Sul. Suppose that, nevertheless, this species may occur there, this could be only north of 30° S. lat., the "Cebus-line." Mr. C. Ritter, to whom I have sent specimens of Dacnis cayana, writes to me that he has obtained examples of this species at Rio de Janeiro, but has never seen it in the State of Rio Grande do Sul. He likewise declares that the statements as to Chrysotis æstiva, as also Cassicus hæmorrhous, Pteroglossus wiedi, Ara maracana, and other species, occurring at Pelotas are erroneous, which is quite in harmony with my own observations.

The alleged occurrence of four species of Culliste at Pelotas is quite incredible, for one species of the genus only occurs south of the "Cebus-line," viz., C. pretiosa, of which C. melanonota is perhaps only a local form. The other three species of Calliste occur in the State of São Paulo, and possibly in Santa Catharina (C. tricolor, teste Berlepsch*), but never in Rio Grande do Sul. And if such species of São Paulo and Santa Catharina really extend their distribution to Rio Grande do Sul, they will be found north of the "Cebusline," and not near Pelotas. A member of the Central Fauna which never occurs in the South-eastern Brazilian provinces is Nemosia guira. Other species of Rio and São Paulo which do not occur in Rio Grande do Sul, and, as I believe, not even in Santa Catharina, are Sycalis flaveola and Elainea pagana. Pteroglossus wiedi is a species which occurs north of the "Cebus-line." I obtained it at Mundo Novo, and Mr. C. Ritter at S. Sebastian do Cahey, but never at Pelotas. Species of Andigena and Scardafella have also never been found in Rio Grande do Sul.

The following case is quite conclusive :- The Ben-te-vi (Pitangus sulphuratus) is represented in the different parts of Brazil by three forms of the same species. The typical form P. sulphuratus typicus occurs at Pará, P. sulphuratus maximiliani ranges from Ceará to Santa Catharina, and P. bulivianus, or, as I believe it to be more correctly called, P. sulphuratus bolivianus, is found from Rio Grande do Sul to Argentina, Bolivia, and Matto Grosso. As the Pelotas specimens of Joyner are referred to P. sulphuratus maximiliani, it is quite evident that they cannot have been procured at Pelotas. On the other hand, it is noticeable that none of the characteristic southern forms obtained by me in the campos regions, and especially near Pelotas, such as Bolborhynchus monachus (Bodd.), Anumbius acuticaudatus Less., Limnophyes curvirostris Gould, nor certain species of Cinclodes, Geositta, Phleocruptes, were collected by "Joyner" at his mysterious "Pelotas." It is therefore desirable to investigate the expe-

• "Zur Ornithologie der Provinz Santa Catharina," J. f. O. 1873, p. 283.

ditions made by Mr. Joyner in Brazil. It is possible that his "Pelotas" may refer to the Pelotas river, which forms the boundary between the States of Rio Grande do Sul and Santa Catharina, between $27^{\circ}-28^{\circ}$ S. lat., and where the fauna may correspond to that represented in the collection of Mr. Joyner. Until we have exact information on the localities visited by Joyner, I cannot admit these species with inexact habitats as proper for discussion, and they have consequently been omitted in my list of Rio Grande do Sul birds, which I have just finished.

São Paulo, March 10th, 1899.

[We quite agree with the author of this paper that there must have been an error in the locality "Pelotas, Rio Grande do Sul," assigned to Joyner's specimens. On examining the labels of the specimens in the British Museum, we find that they are not original labels of the collector, but written, probably under Salvin's instructions, on card-labels specially prepared for the Salvin-Godman Collection.

Joyner, as we are kindly informed by Mr. Alexander Fry, was a civil engineer, employed on the waterworks of the city of São Paulo in the years 1881-3. Some of his specimens are labelled "Rio Claro, Goyaz," as will be observed in the Catalogue of Birds. This locality may be correct, but that of "Pelotas, Rio Grande do Sul," is, no doubt, *quite unreliable*. Mr. Fry does not believe that Mr. Joyner was ever at Pelotas himself, and the birds so labelled were probably procured from some one else.—P. L. S.]

XXXVI.—Proceedings at the Anniversary Meeting of the British Ornithologists' Union, 1899.

THE Annual General Meeting of the British Ornithologists' Union was held at the rooms of the Zoological Society of London, 3 Hanover Square (by permission of the Council of that Society), on Wednesday, the 3rd of May, at 6 P.M., Mr. F. DUCANE GODMAN, F.R.S., President, in the Chair.