Article IX.—THE GENERIC AND SPECIFIC NAMES OF SOME OF THE OTARIIDÆ.[1]

By J. A. Allen.

The northern and southern Sea Lions, often known respectively as Steller's Sea Lion and Forster's Sea Lion, furnish an instructive illustration of the difficulties encountered in arriving at a fair knowledge of animals long known only from the vague accounts of explorers and travellers who, while eminent in other ways, are rarely good naturalists. Exact knowledge of the northern species dates from Steller (1751), whose classic memoir, 'De Bestiis Marinis,' forms a conspicuous landmark in the early history of mammalogy. In this both the Sea Lions and Sea Bears of Bering Sea were made known with admirable detail and clearness for this early period, and for nearly a century this memoir remained the chief source of information concerning them. Soon after Steller wrote, voyagers to the antarctic seas there met similar animals, but their accounts of them were vague and more or less erroneous. Steller's descriptions formed the basis of the introduction of these animals into the works of later systematists, his Sea Bear becoming the foundation of the *Phoca ursina* of Linnæus (1758), and his Sea Lion the principal basis of Schreber's *Phoca jubata* (1776). As their southern representatives became known they were identified by the naturalists of the day with Steller's species. Thus for half a century the histories of these antipodean forms were blended; there were only a single species of Sea Lion and only a single species of Sea Bear, each being regarded as common to the arctic and antarctic seas.

It was not till 1816 that Péron affirmed the specific distinctness of the northern and southern forms, and asserted

[1] In preparing a report on the Mammals of Patagonia for the 'Princeton University Reports on the Patagonian Expeditions of 1896–1899,' it has been necessary to consider the Pinnipeds of that region, an outcome of which is the discovery that the nomenclature of some of the species and genera is subject to correction. The present paper is an abstract of some of the results reached, the historical details on which the present rulings are based being reserved for later publication in full in the connection above stated.

that no species of animal was common to both these widely separated regions.

In the meantime a few specimens of the southern species, sometimes skulls without skins, sometimes skins without skulls, reached European museums, but it was not till about 1840 and later that specimens of the northern forms became in like manner available for investigation, and it was not till many years later that the real differences became known, when it was found that the northern and southern species were in no case even congeneric. Before this time, however, the names of numerous species had been added to the literature of zoölogy, based either on the very inadequate accounts of explorers, or on single specimens, often immature, and frequently from erroneously assigned or wholly unknown localities. Thus the nomenclature of the subject became so complicated and overburdened with synonyms that the task of unravelling of the tangled skein has scarcely yet been fully accomplished.

The Northern Sea Lion.

The Northern Sea Lion, or the *Eumetopias stelleri* of modern zoölogists, was first introduced into systematic zoölogy by Schreber[1] in 1776, under the name *Phoca jubata*, but he combined with it references to Pernetty's account of the Southern Sea Lion, and, as the only illustration of any Sea Lion available, copied Pernetty's wretched caricature of the southern species. Thus *Phoca jubata* was composite, though primarily based on Steller, and continued thus till 1816, when Péron[2] gave a new name to the southern species and retained, or 'restricted,' the name *jubata* to Steller's Sea Lion.[3] He also for the first time separated the eared seals from the earless seals, retaining the latter in the genus *Phoca* and establishing for the former a new genus *Otaria*. Lesson, in 1828,[4] in his reckless distribution of new names,

[1] Säug., III, 1776, p. 300.
[2] Voy. aux Terr. Austr., II, 1816, p. 40, footnote.
[3] *Op. cit.*, p. 35.
[4] Dict. class. d'Hist. Nat., XII, 1828, 420.

unrestrained by any rules of nomenclature, proposed for the Northern Sea Lion the name *Otaria stelleri*, under which specific name it has since been currently recognized. Its proper name, however, as shown by the following citations, is *Eumetopias jubata* (Schreber).

Eumetopias jubata (*Schreber*).

Phoca jubata SCHREBER, Säug. III, 1776, 300. Sea Lion of Steller, mainly; not the plate (pl. lxxxiii), nor the references to Pernetty.
Otaria jubata PÉRON, Voy. aux Terr. Austr. II, 1816, 35, 53, referring exclusively to the Sea Lion of Steller.
Eumetopias jubata ALLEN, MSS. (in Reports of the Princeton University Expeditions to Patagonia, 1896–1899, Mammalia).
Otaria stelleri LESSON, Dict. class. d'Hist. Nat. XIII, 1828, 420.
Eumetopias stelleri GRAY, Ann. & Mag. Nat. Hist. 3d Ser. XVIII, 1866, 233; and of most subsequent authors.

THE SOUTHERN SEA LION.

At the time Péron restricted the name *Otaria jubata* to the Sea Lion of Steller, he imposed upon the Southern Sea Lion the name *Otaria leonina*, leaving no doubt of his intention to separate the two species and to restrict the name *jubata* to the northern one.

Unfortunately, however, his name *leonina* for the southern species is unavailable, on account of Molina having given, long before (1782), the name *Phoca leonina* to the same species, a name Linnæus had previously given (in 1758) to the Elephant Seal, or Sea Lion of Anson, a wholly different animal. It is therefore necessary to select from the later-given names the first that is unequivocably referable to the Southern Sea Lion, and in all other respects tenable. This proves to be *Phoca byronia* of Blainville, based exclusively on the skull of a Sea Lion said to have been brought by Commodore Byron from the Island of Tinian, one of the Mariana or Ladrone group, but which there is good reason to believe came either from the Straits of Magellan or from Juan Fernandez Island, both of which places were visited by Commodore Byron on the same voyage. That it could not

have come from the Island of Tinian is beyond question, since the Mariana Islands are far away from the range of any known species of Pinniped. There is, further, no doubt as to this skull being referable to the Southern Sea Lion, the *Otaria jubata* of most modern authors, it being not only identifiable as such from Blainville's description and figure of it, but, being still extant in the Museum of the College of Surgeons of London, has repeatedly been examined and identified as such by competent authorities.

There are many later names applicable to this animal, but none earlier that are entitled to recognition. As already stated, Péron's name *leonina*,—a natural and very proper designation, and one which for many years was currently applied to it,—is preoccupied and unavailable.

The *Phoca porcina* of Molina (1782) is recognizable merely as an eared seal, but whether referable to *Otaria* or *Arctocephalus* cannot be determined from Molina's very imperfect account of it.

The *Phoca longicollis* of Shaw (1800), based on the Long-necked Seal of Grew and Parsons, formerly in the Museum of the Royal Society of London, from an unknown locality, is not identifiable, beyond its being a young eared seal. It was referred by Gray, at different times, to *Otaria leonina* and to *Arctocephalus falklandicus*, as he thought it more likely to have come from southern South America than elsewhere.

Phoca flavescens Shaw (1800) was based on a young eared seal in the Leverian Museum, described by Pennant, said to have come from the Straits of Magellan. It was only about two feet long, and described so imperfectly that it can only be identified as a young eared seal.

The principal synonymy of the Southern Sea Lion may be given as follows:

Otaria byronia (*Blainville*).

Phoca jubata SCHREBER, Säug. III, 1776, 300, pl. lxxxiii. In part; only in so far as it relates to the Sea Lion of Pernetty.

Otaria jubata DESMAREST, Mamm. I, 1820, 248, in part only.

Otaria jubata PETERS, Monatsb. Akad. Berlin, 1866, 263. Also of both Peters and Gray subsequently, and of most later writers.
Phoca leonina MOLINA, Sag. Stor. Nat. Chili, 1782,—not of Linnæus.
Otaria leonina PÉRON, Voy. aux Terr. Austr. II, 1816, 40, 65. Not *Phoca leonina* of Linnæus.
Otaria leonina GRAY, Zoöl. Erebus and Terror, Mamm. 1841, 5, pl. xvii, fig. i, 2. Also of Gray's later papers from this date to Oct., 1866.
?*Phoca flavescens* SHAW, Gen. Zoöl. I, ii, 1800, 260. Not identifiable.
Phoca byronia BLAINVILLE, Journ. de Phys. XCI, Oct. 1820, 300, fig. 3.
Otaria byronii DESMAREST (ex Blainville MS.) Mamm. I, 1820, 240. Based apparently on Blainville's MS., as above, as Blainville's paper is not definitely cited.
Ontaria [sic] *molossina* LESSON & GARNOT, Férrussac's Bull. Sci. Nat. 1826, 96.
Platyrhynchus uraniæ LESSON, Man. de Mamm. 1827, 204.
Otaria pernettyi LESSON, Dict. class. d'Hist. Nat. XIII, 1828, 420.
Otaria chilensis MÜLLER, Arch. f. Naturg. 1841, i, 333.
Otaria ulloæ TSCHUDI, Fauna Peruana, Mamm. 1844–46, 136, pl. vi. Also of Peters, 1866.
Otaria godeffroyi PETERS, Monatsb. Akad. Berlin, 1866, 264, pl. i.
Otaria minor GRAY, Ann. & Mag. Nat. Hist. 4th ser. XIII, 1874, 326.
Otaria pygmæa GRAY, *ibid.* 326.

THE GENERIC NAME OF THE NORTHERN FUR SEALS.

On the reception by Gray in 1859 of a skull of a northern Fur Seal he found that, as he had supposed previously, it was not only specifically distinct from all the southern Fur Seals, but represented a new genus, which he named *Callorhinus*. This name was found later by Dr. T. S. Palmer to be preoccupied, and he proposed in its place the name *Callotaria*.[1] Still later[2] he believed he had found an earlier name for the group in *Otoes* G. Fischer (1817).[3] An examination, however, of Fischer's name leads me to a different conclusion from that reached by Dr. Palmer, so that in my opinion *Callotaria* Palmer (1892) is the proper name for the group. Fischer, evidently ignorant that Péron had already (in the preceding year) given the generic name *Otaria* to the Eared Seals, proposed for them the name *Otoes*, based on G. Cuvier's

[1] Proc. Biol. Soc. Washington, VII, p. 159, July 27, 1892.
[2] Proc. Biol. Soc. Washington, XIV, p. 133, Aug. 9, 1901.
[3] Mém. Soc. Imp. des Nat. de Moscow, V, 1877, p. 445.

group "Les Phoques à oreilles extérieures," or "Otaries de Péron," [1] Cuvier neglecting to use Péron's name in its Latin form. Fischer's diagnosis is an abridged paraphrase of Cuvier's, even to the inclusion of Cuvier's ambiguous statement respecting the number of incisors; he cites as referable to *Otoes* "Phoca jubata, ursina, Lin. Gmel.,"—in other words, the Sea Lions (*Phoca jubata* auct.) and the Sea Bears (*Phoca ursina* auct.) as recognized by Cuvier, and as known to the naturalists of that day, who all, except Péron, believed there was only one species of each, common alike to the arctic and antarctic regions. Even as late as 1823 G. Cuvier [2] spoke derisively of Péron's assumption that none of the Seals of the "hémisphère antarctique" were "de même espèce que ceux du nord."

It consequently happens that the genus *Otoes* Fischer, 1817, is an exact synonym of *Otaria* Péron, 1816. Dr. Palmer's conclusion to the contrary is based on a misapprehension of the case, through evident lack of familiarity with the complicated history of the group in question, as shown by his statement of the case, namely: "*Phoca jubata* Gmelin is a composite species based in part on a southern fur seal [*lege*, southern sea lion] and in part on the northern sea lion. . . . The name had been, however, previously applied by Forster in 1775, and is now generally restricted to the southern fur seal [*lege*, southern sea lion]. *Phoca ursina* Gmelin (*P. ursina* Linn.) is the northern fur seal of Bering Sea and, as the only identifiable species in the group [*Otoes*], may be considered as the type of *Otoes*. . . . What he [Fischer] did was simply to apply a generic name to Cuvier's group which, as shown above, was based chiefly on the northern and not on the southern fur seal."

As regards the above, (1) the components of *Phoca jubata* Gmelin (which, however, is Schreber's species) are perfectly identifiable (as shown above, p. 112), and are equivalent to the genera *Otaria* and *Eumetopias* as now currently restricted,

[1] Règne Animal, I, 1817, p. 166.
[2] Ossem. foss., V, 1823, p. 218.

and thus had nothing to do with any "southern fur seal." (2) The name *Phoca jubata* has been attributed by various authors, at different times, to "Forster, 1775," but I am unable to find that he ever used at this date any terms for the eared seals other than sea lion and sea bear. In accordance with the belief of his time, he supposed there was only one species of each, and that both were common to both the arctic and antarctic regions. In his posthumous work, 'Descriptiones Animalium,' brought out by Lichtenstein in 1844, he used the Latin terms *Phoca jubata* and *Phoca ursina* in just this sense; but the only members of the group he knew personally were the southern species; the "*Phoca ursina*" he described, and transmitted the drawing of to Buffon, and which Buffon published, was the Sea Bear of New Zealand, *Arctocephalus forsteri* (Lesson) of modern writers. (3) Cuvier's *Phoca ursina*, instead of being "the only identifiable species in the group," is composite, to the extent even of embracing three perfectly identifiable species of Fur Seal, and a fourth species that was probably a young *Otaria*, but which is not positively identifiable. These are (*a*) the Sea Bear of Steller; (*b*) the Fur Seal of the Cape of Good Hope ("*Phoca pusilla*"); (*c*) *Arctocephalus forsteri*, the species figured in Buffon's plate cited by Cuvier; and (*d*) the *Phoca flavescens* Shaw, not satisfactorily identifiable. The plate cited by Cuvier ("Buff., Suppl. VII [*lege* VI], pl. xlvii") Buffon states is from a drawing sent him by Forster, which, as those familiar with the literature of the subject know, relates to the Fur Seal of New Zealand, having been made at Dusky Bay, on the southeast coast of South Island, New Zealand, March 31, 1773.[1]

It is thus clear that *Otoes* is unavailable for the *Callotaria* group, since if one name can ever be considered as a synonym of another, it is evident that *Otoes* and *Otaria* hold such a relation.

The synonymy of *Callotaria* will stand as follows:

[1] *Cf.* Forster, Descrip. Anim., p. 64; Forster's Voyage Round the World, I, 1777, p. 151; Buffon, Hist. Nat. Suppl., VI, 1782, pp. 330, *et seq.*

Genus **Callotaria** *Palmer.*

Phoca and *Otaria*, in part, of early authors.

Callorhinus GRAY, P. Z. S. 1859, 359. Type "*Arctocephalus ursinus* Gray" = *Phoca ursina* Linn. Preoccupied by *Callirhinus* Blanchard, 1850, for a genus of Coleoptera.

Arctocephalus GILL, Proc. Essex Inst. V, 1866, 7, 11. Type, "*Phoca ursina* Linn." Not *Arctocephalus* F. Cuvier, 1824.

Callotaria T. S. PALMER, Proc. Biol. Soc. Washington, VII, 1892, 156; July 27, 1892. To replace *Callorhinus* Gray, preoccupied.

Otoes T. S. PALMER, Proc. Biol. Soc. Washington, XIV, 1901, 133; Aug. 9, 1901. To replace *Callotaria* Palmer. Not *Otoes* G. Fischer, 1817 = *Otaria* Péron.