man civilization, commerce, etc. This has resulted in placing the same species in similar regions of both continents, as, for example, *Fagonia cretica* in Lower California and Chile; *Munroa squarrosa*, western plains of North America, plains of Argentine and high plateaus of Chile and Bolivia; *Frankenia grandiflora*, Southern California and Arizona, coast lands of Chile; *Oxytheca dendroidea*, *Lastarriæa chilensis*, and *Chorizanthe commissuralis*, all in Southern California and Western Chile.

(2) Those due to the operation of natural causes acting under present conditions of climate, geology, etc. Under this head may be cited such species as *sida leprosa*, *hastata*, *anomala*, *Cienfugosia sulphurea*, *Spergularia plattensis* and, in general, elements of Gulf zone distribution; also certain elements which still find a pathway along the continental axis, including some alpine and mountain xerophilous genera.

(3) The third category of distribution would include those phenomena due to geological and climatic changes acting through long periods. Under this head are included the elements of greatest significance in the relationsip of the North and South America floras. The endemic boreal flora of the Andes, the equally endemic boreal flora of the Mexican Cordilleras, and genera with sharply distinct species or sub-genera in the arid extra-tropical regions of both continents, which may be called remnant elements.

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NAMES OF ANIMALS PUBLISHED BY OSBECK IN 1765.

In 1757, Peter Osbeck, a pupil of Linné published in Stockholm a work entitled: 'Dagbok öfver en Ostindisk resa aren 1750–1752.' The work* was subsequently translated into several languages, with dates of publication as follows: in German, 1765 (Rostock), and 1772 (Leipzig), two editions; in French 1771; in English, 1771. Of these translations I have examined the German, 1765, and the English. The latter translation is not from the original, as we learn from its editor, but from the German, the latter having had the advantage of revision by Osbeck, who, we are told, made some additions to it.

* The German translation is entitled: Reise nach Ostindien und China.

On comparison of Osbeck's proposed names for the various species of animals discovered with the tenth and twelfth editions of Linné's *Systema Naturæ*, one is struck by the number which are not referred to in those works; and, as far as I can learn, these omissions have not been included in later works in most instances. It is for the purpose of bringing them to the attention of naturalists that I offer the present notes.

Such of Osbeck's names which are tenable should date from the 1765 translation which follows the tenth edition of Linné. The pagination noted herein refers to that volume.

MAMMALIA.

Cervus javanicus. Page 357. Java.

This is, probably, the *Tragulus* (= *Moschus*) *javanicus* Gmelin, 1788. The synonymy should be *Tragulus javanicus* (Osbeck), 1765, = *Moschus javanicus* Gmelin, 1788.

AVES.

Sitta chinensis. Page 326. China.

The *British Museum Catalogue of Birds* gives as a synonym of *Sitta cæsia*, a *Sitta chinensis* Viellot, 1819, but on reference to the *Nouv. Dict.*, v. XXXI, p. 332, it will be seen that Viellot gives Osbeck as authority for the name. Therefore *Sitta chinensis* Osbeck, 1765 and 1771, has priority over *Sitta cæsia* M. and W., 1810.

ANAS CHINENSIS. Page 340. China.

In the work just referred to there is a reference under *Anas hina* Gmelin, as follows: *Anas chinensis* Osbeck, Voy. II, p. 33. This is to the English edition, 1771. The synonymy should be *Anas Chinensis* Osbeck, 1765 (= *Anas hina* Gmelin, 1788).

Gmelin gives 'Osbeck (*it. 2*, p. 33)' as authority for *Anas hina;* but no such name occurs in the latter's book. It would therefore seem that *hina* is a misprint for *chinensis.*

DIOMEDEA ADSCENSIONIS. Page 382. Ascension Isld.

This is evidently synonymous with *Sula piscator* (= *Pelecanus piscator* Linné, 1758), with which species Osbeck compares it.

REPTILIA AND BATRACHIA.

TESTUDO JAVANICA. Page 128. Java.

From the description this is clearly a *Chelone,* and without doubt the same as *Chelone imbricata* (Linné), 1766. The latter thus becomes *Chelone javanicus* (Osbeck), 1765.

RANA CHINENSIS. Page 244. China.

Without doubt a *Bufo,* and referable to *Bufo bufo* (Linné). If the Chinese and Japanese representatives are not distinct races, then Osbeck's name would have precedence over Schlegel's *Bufo bufo javanicus.*

It is well to point out here that Boulenger (*Tailless Batrach. Eurl.* II, 265) has erred in referring Osbeck's *Rana chinensis* as a variety of *Rana esculenta* Linné. Osbeck says in his description, 'The body above warty,' which sufficiently indicates that the species is not a *Rana.*

Stone (*Proc. Ac. Nat. Sci.*, Phila., 183, 1899) states that *Rana chinensis* Boulenger (nec Osbeck) is quite distinct from *Rana esculenta,* in which event the former will require another name, which will be *Rana marmorata* Hallowell, 1860 (teste Stone).

LACERTA CHINENSIS. Page 366. China.

This lizard is probably identifiable from the description, which indicates that it belongs to the Geckonidæ. This name has been entirely overlooked by subsequent writers.

PISCES.

SQUALUS CANINUS. Page 102. Cape of Good Hope.

A synonym of *Carcharodon carcharias* (Linné), 1758, the great blue shark.

BALISTES CHINENSIS. Page 147. China.

Richardson (*Rep. Brit. Assoc. Ad. Sci.*, 201, 1845) refers this to the genus *Monacanthus.* However, in Bleecker (*Atlas*) and in the *Brit. Mus. Catal. Fishes,* Bloch is given as authority for the species; it is also described by Gmelin as *Balistes sinensis.* It should stand *Monacanthus chinensis* (Osbeck), 1765 and 1771 = *Balistes sinensis* Gmelin, 1788.

PERCA ADSCENSIONIS. Page 388. Ascension Isld.

Now *Holocentrus ascensionis* (Osb.) J. & E. The date for this species should be 1765. Note that the original name is *adscensionis,* not *ascensionis.*

SCOMBER GLAUCUS. Page 387. Ascension Isld.

Originally named *Scomber adscensionis* by Osbeck, 1757, but in the later translations 1765 and 1771 called *S. glaueus,* perhaps indicating it to be the same as *S. glaucus* Linné. Jordan and Evermann suggest its identity with *Caranx guara.*

In addition to the foregoing fishes Osbeck describes the following, whose names are not to be found in recent synonymy:

SPARUS CHINENSIS. Page 340. China.

Not the *Sparus chinensis* Lacèp.

SQUALUS ADSCENSIONIS. Page 388. Ascension Isld.

GOBIUS TROPICUS. Page 392. Ascension Isld.

SY[N]GNATHUS ARGENTEUS. Page 396. South Atlantic.

MOLLUSCA.

Chiton laeve. Page 80. Spain.

According to Linné, this is the same as his *Chiton punctatus*. Professor Pilsbry, to whom I showed Osbeck's description says it is probably the same as *Chiton olivaceus* Speng.

Cunnus chinensis. Page 247. China.

Osbeck does not state whether this bivalve is a fluviatile or a marine form, which makes his short description valueless. Were it a fresh-water form, the generic name *Corbicula* would be replaced by *Cunnus*. In the English translation this name is misprinted, *Conus*.

INSECTA.

Phalaena fenestrata. Page 269. China.

Osbeck proposes this name for the 'Phalæna plumata permaxima Orientalis oculata.' (Petiver, *Gazophylacii*, Pl. 8, f. 7), which, however, was named *Phalæna atlas* by Linné, 1758, Osbeck's name becoming thereby a synonym. The *fenestrata* Osbeck must not be confused with the *Phalæna fenestrata* Fabricius (*Syst. Ent.*, p. 641, 1775).

Papilio Lintingensis. Page 148. China.

This name will have to be adopted for the Indo-Chinese variety of *Junonia œnone* Linné, known as var. *hierta* Fabricius. The synonymy should be *Junonia œnone* Linné, 1758, var. *Lintingensis* (Osbeck), 1765 and 1771, = *hierta* Fabricius, 1798.

Apis rufa. Page 127. Java.

This is not the *Apis rufa* Linné, 1758. The description is, however, too meager to admit of identification of the insect.

CRUSTACEA.

There are two species described by Osbeck, which appear to have been omitted from synonymy. They are:

Cancer chinensis. Page 151. China.

Cancer adscensionis. Page 389. Ascension Isld.

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THE CARNEGIE MUSEUM PALEONTOLOGICAL EXPEDITIONS OF 1900.

Through the generosity of the founder of this institution, the Department of Paleontology has been able to continue the work begun in the season of 1899 in the Upper Jurassic formations of central Southern Wyoming. Mr. O. A. Peterson has had charge of the work in this region, and the splendid results obtained there are due to his skill and energy and to those of his assistant, Mr. C. W. Gilmore of the Wyoming State University, who joined Mr. Peterson in June and continued with him until the close of the season.

The investigations were confined chiefly to the Atlantosaurus beds on Sheep Creek, some twenty-five miles northeast of Medicine Bow, though some attention was also given to the Baptanodon beds in the immediate vicinity.

The chief results obtained were a complete pelvis with sacrum and one hind limb and foot of Diplodocus in position; one maxilla and a posterior portion of the skull and a number of series of vertebræ from various regions of the vertebral column. Numerous other isolated bones belonging to the same genus were also recovered. All this is most welcome material and will form an important supplement to the Diplodocus skeleton collected by the expedition of 1899, which we hope soon to be able to mount as a complete, though composite, skeleton. The fore limb and foot are at present the only important parts missing.

The party was quite fortunate in securing the greater portion of a skeleton of *Brontosaurus*, as well as considerable remains of *Stegosaurus* and a large carnivorous Dinosaur. The Baptanodon beds yielded a skull and anterior cervicals and ribs of Baptanodon. In all some ninety large cases of Jurassic vertebrates were taken up and packed, and will, it is hoped,