considerably larger, while some are smaller, and of the former several are almost whole-coloured, being of a sooty or dark cinereous hue both above and below. All over the world Shearwaters seem to have precisely the same habits, laying their single purely white egg in a hole under ground. The young are thickly clothed with long down, and are ex­tremely fat. In this condition they are thought to be good eating, and enormous numbers are caught for this purpose in some localities, especially of a species, the *P*. *brevicaudus* of Gould, which frequents the islands off the coast of Aus­tralia, where it is commonly known as the “ Mutton-bird.” For works treating of the Shearwaters, see those cited under Petrel (vol. xviii. p. 712). (a. n.)

SHEATHBILL, a bird so-called by Pennant in 1781 *(Gen. Birds,* ed. 2, p. 43) from the horny case @@1 which ensheaths the basal part of its bill. It was first made known from having been met with on New-Year Island, off the coast of Staten Land, where Cook anchored on New Year’s eve 1774. @@2 A few days later he discovered the islands that now bear the name of South Georgia, and there the bird was again found,—in both localities frequenting the rocky shores. On his third voyage, while seeking some land reported to have been found by Ker­guelen, Cook in December 1776 reached the cluster of desolate islands now generally known by the name of the French explorer, and here, among many other kinds of birds, was a Sheathbill, which for a long while no one suspected to be otherwise than specifically identical with that of the western Antarctic Ocean ; but, as will be seen, its distinctness has been subsequently admitted.

The Sheathbill, so soon as it was brought to the notice of naturalists, was recognized as belonging to a genus hitherto unknown, and the elder Forster in 1788 *(Enchiridion,* p. 37) con­ferred upon it, from its snowy plumage, the name *Chionis,* which has most properly received general acceptance, though in the same year the compiler Gmelin termed the genus *Vaginalis,* as a render­ing of Pennant’s English name, and the species *alba.* It has thus become the *Chionis alba* of ornithology. It is about the size of and has much the aspect of a Pigeon ; @@3 its plumage is pure white, its bill somewhat yellow at the base, passing into pale pink towards the tip. Round the eyes the skin is bare, and beset with cream-coloured papillæ, while the legs are bluish-grey. The second or eastern species, first discriminated by Dr Hartlaub *(Rev. Zoologique,* 1841, p. 5 ; 1842, p. 402, pl. 2) @@4 as *C. minor,* is smaller in size, with plumage just as white, but having the bill and bare skin of the face black and the legs much darker. The form of the bill’s “ sheath ” in the two species is also quite different, for in *C. alba* it is almost level throughout, while in *C. minor* it rises in front like the pom­mel of a saddle. Of the habits of the western and larger species not much has been recorded. It gathers its food, consisting chiefly, as Darwin and others have told us, of sea-weeds and shell-fish, on rocks at low water ; but it is also known to eat birds’ eggs. There is some curiously conflicting evidence as to the flavour of its flesh, some asserting that it is wholly uneatable, and others that it is palatable,—a difference which may possibly be due to the previous diet of the particular example tasted, to the skill of the cook, or

the need of the taster. Though most abundant as a shore-bird, it is frequently met with far out at sea, and its most northern recorded limit is by Fleurieu *(Voy. de Marchand,* i. p. 19), in lat. 44° S., some 260 miles from the eastern coast of Patagonia. It is not uncommon on the Falkland Isles, where it is said to breed *(Ibis,* 1861, p. 154), though confirmation of the report is as yet wanting, and from thence is found at both extremities of the Strait of Magellan, and southward to Louis-Philippe Land in lat. 60° S. On the other hand, thanks to the naturalists of the British and United States expeditions to Kerguelen Land for the observation of the transit of Venus in 1874, especially Mr Eaton *(Philos. Trans­actions,* clxviii. pp. 103-105) and Dr Kidder *(Bull. U. S. National Museum,* 1875, No. 2, p. 1-4), much more has been recorded of the eastern and smaller species, which had already been ascertained by Mr Layard *(Proc. Zool. Society,* 1871, p. 57, pl. iv. fig. 7) to breed on the Crozet Islands, @@5 and was found to do so still more numer­ously on Kerguelen, while it probably frequents Prince Edward’s Islands for the same purpose. The eggs, of which a considerable number have now been obtained, though of peculiar appearance, bear an unmistakable likeness to those of some Plovers, while occasionally exhibiting a resemblance—of little significance, how­ever—to those of the Tropic-birds.

The systematic position of the Sheathbills has been the subject of much hesitation—almost useless since 1836, when De Blainville *(Ann. Sc. Naturelles,* ser. 2, vi. p. 97) made known certain anatomical facts proving their affinity to the Oyster-catchers (vol. xvii. p. 111), though pointing also to a more distant relationship with the Gulls (vol. xi. p. 274). These he afterwards described more fully *(Vοy. “ Bonite” Zoologie,* i. pt. 3, pp. 107-132, pl. 9), so as to leave no doubt that *Chionis* was a form intermediate be­tween those groups. Yet some writers continued to refer it to the *Gallinæ* and others to the *Columbæ.* The matter may now be regarded as settled for ever. In 1876 Dr Reichenow in Germany *(Jour. f. Orn,,* 1876, pp. 84-89) and in America Drs Kidder and Coues *(Bull. U. S. Nat. Museum,* No. 3, pp. 85-116) published elaborate accounts of the anatomy of *C. minor,* the first wholly confirming the view of De Blainville, the last two @@6 agreeing with him in the main, but concluding that the Sheathbills formed a distinct group *Chionomorphæ,* in rank equal to the *Cecomorphæ* and *Charadriomorphse* of Prof. Huxley (which are, to speak roughly, the *G avise* and *Limicolæ* of older systematists), and regarding this group as being “ still nearer the common ancestral stock of both.” These authors also wish to separate the two species generically ; but their proposals are considered needless by Garrod *(P. Z. S.,* 1877, p. 417) and M. Alph. Milne-Edwards *(Ann. Sc. Naturelles,* ser. 6, xiii. art. 4, p. 24). The opinions of De Blainville and Dr Reichenow are borne out by the observations of Mr Eaton *(loc. cit.),* and no one knowing the habits of an Oyster-catcher can read his remarks without seeing how nearly related the two forms are. Their differences may perhaps justify the separation of each form into what is vaguely called a “Family,” but the differences will be seen by the comparative anatomist to be of slight importance, and the intimate affinity of the *Gaviæ* and *Limicolæ,* already recognized by Prof. Parker and some of the best taxonomers *(cf.* Ornithology, vol. xviii. p. 45) is placed beyond dispute. @@7 (a. n.)

SHEBA. See Yemen.

SHEBOYGAN, a city of the United States, capital of Sheboygan county, Wisconsin, stands on Lake Michigan,

@@@1 A strange fallacy arose early, and of course has been repeated late, that this case or sheath was movable. It is absolutely fixed.

@@@2 Doubtless some of the earlier voyagers had encountered it, as Forster suggests *(L·escr. Animalium,* p. 330) and Lesson asserts *(Man. d'Ornithologie,* ii. p. 343) ; but for all practical purposes we certainly owe its discovery to the naturalists of Cook’s second voyage. By some error, probably of transcription, New Zealand, instead of New-Year Island, appears in many works as the place of its discovery, while not a few writers have added thereto New Holland. Hitherto there is no real evidence of the occurrence of a Sheathbill in the waters of Australia or New Zealand.

@@@3 In the Falkland Isles it is called the “Kelp-Pigeon,” and by some of the earlier French navigators the “Pigeon blanc antarctique.” The cognate species of Kerguelen Land is named by the sealers “Sore-eyed Pigéon,” from its prominent fleshy orbits, as well as “ Paddy-bird”—the last doubtless from its white plumage calling to mind that of some of the smaller Egrets, so-called by the English in India and elsewhere.

@@@4 Lesson *(loc. cit.)* cites a brief but correct indication of this species as observed by Lesquin *(Lycée Armoricain,* x. p. 36) on Crozet Island, and, not suspecting it to be distinct, was at a loss to reconcile the discrepancies of the latter’s description with that given of the other species by earlier authors.

@@@5 A previous announcement of the discovery of its egg *(Ibis,* 1867, p. 458) was premature, the specimen, now in the possession of the present writer, proving to be that of a Gull—a fact unknown to the American writer named above.

@@@6 In some details their memoir is unfortunately inaccurate.

@@@7 The little group of very curious birds, having no English name, of the genera *Thinocοrys* and *Attagis,* which are peculiar to certain localities in South America and its islands, are by some systematists placed in the Family *Chionididæ* and by others in a distinct Family *Thinocoridae* (more correctly *Thinocorythidæ).* They are undoubtedly Limicoline, though having much the aspect of Sand-Grouse, but their precise position and rank remain at present uncertain. *Cf.* Garrod *(ut supra)* and Prof. Parker *(Trans. Zool. Soc.,* x. pp. 301 *sq.).*