

relating how the young Zerubbabel gained the ear of Darius, and successfully reminded him of a forgotten vow to rebuild Jerusalem and the temple, and to restore the holy vessels and permit the return of the citizens to their places, is, as has already been indicated, either an original contribution or one derived from some source which is no longer accessible to us. Chap. v. 7-70, containing the list of those who returned with Zerubbabel under "Darius," with an account of the progress of the temple under "Cyrus," and of the subsequent interruption "for the space of two years," until the reign of "Darius," is derived from Ezra ii. 1-iv. 5. Chaps. vi. and vii., corresponding to Ezra v. and vi., relate how the work was resumed under Darius, and completed in the sixth year of his reign. Chap. viii. 1-ix. 36 repeats the narrative of Ezra vii.-x., and chap. ix. 37-55 that of Neh. vii. 73-viii. 13.

The abruptness which characterizes the book as we now have it, both in its beginning and at its close, suggests the idea that possibly it may be merely a fragment of some larger compilation to which reference is perhaps made in 2 Macc. ii. 13. In its present form it has little to distinguish it as a composition from the work of the Chronicler, of which it is virtually an incomplete abridgment. The special object which the compiler may have had in view is indeed not easily conjectured. Some writers think they can discover a twofold purpose,—to give prominence to the new story about Zerubbabel, and to remove chronological difficulties which are raised by the canonical book of Ezra. If the latter was indeed part of his aim, he has been singularly unsuccessful. Far from obviating any of the difficulty caused by the Chronicler's having apparently introduced Artaxerxes Longimanus and Xerxes between Cyrus and Darius Hystaspis, he has landed himself in new and glaring inconsistencies (comp., e.g., ii. 10, 14, with iv. 44). A more likely hypothesis is that his design was to give to the public something more readable than the bald and literal Alexandrian translation. Critics are not unanimous upon the question whether he took his work directly from the Hebrew or from the present LXX. version. The majority are in favour of the former view; but Keil has the influential support of Schürer (in Herzog's *Encyclopædie*, i. 497, 1877) in the latter opinion. It is uncertain where he wrote. Egypt and Palestine have both been suggested, but without adequate data for a definite conclusion. Whoever he was he had a good command of Greek, nor was he ignorant of Hebrew. As for the date of the work, all we know is that it was already in existence and in repute in the time of Josephus. That historian has unfortunately followed its order of events in preference to that of the canonical Chronicler, and so has brought his narrative into inextricable confusion in all that relates to the Persian period.

Unmistakable references to the work as authoritative are to be met with in Clement of Alexandria, in Cyprian, in Athanasius, and in Augustine (*De Civ. Dei*, xviii. 36). Jerome, on the other hand, in his preface to Ezra and Nehemiah (which is to be found in all modern editions of the Vulgate), has condemned both books of Esdras as "somnia" and "procul abjicienda." It does not occur in any list either of canonical or of "ecclesiastical" writings.¹ Nor does its place in the Alexandrian canon seem to have been altogether undisputed. For it does not occur in all Latin Bibles presumably derived from the LXX.; and towards the beginning of the 16th century it was believed not to exist at all in Greek, so rare had it become.

¹ Unless by *ὁ ποιητής* or Pastor of Athanasius (*Epistola festalis*), Hugo a S. Caro, and others this book is meant. But it is more probable that the "Shepherd" of Hermas is intended. See De Wette-Schrader, *Bibl. sec. 31*, note d. By Augustine's "Esdras libri duo" (*De Doctr. Chr.* ii. 8) we are probably to understand our Ezra and Nehemiah; but compare *De Civ. Dei*, l.c.

2 ESDRAS, the *liber quartus Esdræ* of the Vulgate* (Ezra, Nehemiah, and 1 Esdras being the other three), was originally written in Greek,² and probably entitled *ἀποκάλυψις Ἐσδρά* (so Fritzsche; but Hilgenfeld argues for *Ἐσδράς ὁ προφήτης*). With the exception of inconsiderable fragments, the original (Greek) text has been lost; but numerous ancient translations still testify to the wide-spread popularity which the work enjoyed during the earlier centuries of the Christian era. Five distinct versions are now known to scholars,—the Latin, Syriac, Ethiopic, Arabic, and Armenian. Of these the Latin is the oldest and the best. In most of its MSS., and in all the eastern versions, the first two and the last two chapters of the received Vulgate text are omitted; and eighty-three verses are inserted between vii. 35 and vii. 36. The genuineness of these verses cannot be doubted: they were known to Ambrose, Vigilantius, and Jerome, and in 1875 were rediscovered by Bensly in a MS. of the 9th century. The four chapters just mentioned Fritzsche proposes to call the fifth book of Ezra. They are certainly distinct from the original 2 Esdras, and are by general consent assigned to a Christian authorship of or near the 3d century.

The apocalyptic character of 2 Esdras has already been indicated (vol. ii. p. 175-6). Its seven visions all have reference to the future of Jerusalem, the central question being whether and when the city is to be restored and its enemies punished. The fifth vision (xi. 1-xii. 51) is of chief importance to the critic; his conclusions upon the date and origin of the book must depend almost entirely upon his interpretation of the symbolical eagle, the wings, the feathers, and the heads there described. According to Laurence, C. J. van der Vlis, and Lücke (2d edition), the vision is to be explained as having reference to the whole course of Roman history from Romulus to Julius Cæsar. The three heads are Sulla, Pompey, and Cæsar; and the work was composed about the time of the assassination of the last-named. Hilgenfeld, in his earlier interpretation of the vision (1857), referred it to the Ptolemies; but in 1867 he substituted the Seleucidæ, while adhering to his original opinion that the three heads are Cæsar, Antony, and Octavian, and that the work was written immediately after the death of Antony. The majority of modern critics believe that Rome under the empire is intended; but there are numerous differences as to the details of this interpretation. Gutschmid and some others identify the three heads with Septimius Severus, Caracalla, and Geta, thus placing the date of the composition of this part of the work as late as the year 218 A.D.⁴ But the more general opinion since Corrodi (1781) has been that the three Flavian emperors, Vespasian, Titus, and Domitian, are intended by that symbol. Corrodi himself and Ewald assign the book to the reign of Titus; Volkmar, Langen, and Renan to that of Nerva; and Gfrörer, Dillmann, Wieseler, and Schürer to that of Domitian. On the whole, it may be said that there is a growing consensus of opinion in favour of a date somewhere between 81 and 97 A.D.

As upon the question of date, so upon the question of authorship, critics are now more nearly agreed than formerly in the belief that the book belongs to the Jewish cycle of apocalyptic literature, and that its author was probably a Pharisee, and possibly one who may have fought on the walls of Jerusalem in the final struggle. It is, indeed,

² Though it begins there with the words "Liber Esdræ prophete secundus." In the Syriac, Arabic, and Ethiopic versions it is styled the first of Ezra. In the Armenian it is the third.

³ Ewald is almost alone in claiming for it a Hebrew original (*Gesch.* vii. 69). See also Derenbourg, *Revue critique* for 1876, p. 132.

⁴ Gutschmid agrees with Hilgenfeld as to the date of the rest of the work.

strongly, even fiercely, Jewish in its sympathies; and it is not a little remarkable that it should have made so little impression upon the Jewish mind, while by the Christians, on the other hand, it was received with great respect, and was indebted to them for its preservation. It has not passed through their hands without alteration. The insertion of the word "Jesus" in chap. vii. 28 may be mentioned as an instance of the changes it has undergone.

By the author of the epistle of Barnabas (chap. xii.), by Clement of Alexandria (*Strom.* iii. 16), by Tertullian (*De hab. mul.*, 3), and by Ambrose (*De Bono Mortis*, chap. x.-xii.), 2 Esdras is referred to as prophetic scripture. The unfavourable judgment of Jerome upon both books of Esdras is on the other hand repeated with special emphasis with regard to this in his treatise against Vigilantius. The work was never included in any list of canonical or "ecclesiastical" writings, nor did it generally appear in MS. Latin bibles. It was printed, however, in Pfister's Bamberg Latin Bible (1460), and frequently thereafter. To this circumstance, doubtless, it owes its somewhat too high position, both in the Protestant and in the Romish Apocrypha. It may be interesting to notice that Columbus drew from chap. vi. 42 one of the arguments by which he supported his cause in the conference of Salamanca in 1487 (Navarrete, *Coleccion*, ii. 261).

It cannot be doubted that 2 Esdras has exercised considerable influence on the course of Christian thought, especially on eschatological subjects; but in cases of real coincidence between its teaching and that of Paul, the honour of priority is now very generally conceded to the canonical writer. The work is of great authority in some Oriental churches; and it has been a special favourite with many Western mystics, such as Schwenkfeld and the once famous Antoinette Bourignon.

Tischendorf, in his *Apocalypses Apocrypha*, prints a Greek Apocalypse of Esdras, which is to be distinguished from 2 Esdras. It seems to date from the 3d century of the Christian era, and to belong originally to the Christian cycle (see vol. ii. p. 179).

The best commentary on 1 Esdras is that of G. F. Fritzsche in the *Exegetisches Handbuch* (Leipzig, 1851). See also his critical edition of the text (*Libri apocryphi Veteris Testamenti græce cum commentario critico* (Leipzig, 1871); De Wette-Schrader, *Einleitung*, sects. 363-4 (1869); Schürer in Herzog's *Encyclopædie*, i. 496 (1877).—There have been several critical editions of the Latin text of 2 Esdras, the earliest having been those of Fabricius (1741) and Sabatier (1751). Laurence was the first editor of the Ethiopic version (Oxford, 1820), Ewald of the Arabic (Göttingen, 1863), and Ceriani of the Syriac (Milan, 1868). The Vatican codex of the Arabic has now for the first time been edited by Gildemeister (Bonn, 1877). The Armenian is to be found in the Armenian Bible (Venice, 1805). The latest editions of the Latin are those of Hilgenfeld (1869) and of O. F. Fritzsche (*Libri Apocryphi*, as above). A good account of the work, with an almost exhaustive catalogue of the modern literature of the subject, is given by Schürer in his *Neutestamentliche Zeitgeschichte* (Leipzig, 1874). In 1875 Bensly published the results of an examination of the Amiens MS., which dates from the 9th century. The missing fragment has also been found in a Spanish MS. (see *Cambridge Journal of Philology*, 1877). See also Renan, *Les Évangiles* (Paris, 1877), and Drummond, *The Jewish Messiah*, (London, 1878).

ESHER, a village and parish in the county of Surrey, England, is situated about 15 miles S.W. of London. Near it is Claremont Palace (built by the great Lord Clive), formerly the residence of the Princess Charlotte, and more recently of Louis Philippe and his family. Of the mansion house of Esher, in which Cardinal Wolsey resided for three or four weeks after his sudden fall from power in 1529, only the gatehouse now remains. A new mansion was erected in 1803. Esher church contains some fine memorials, and one of its three bells is said to have been brought from San Domingo by Sir Francis Drake. The population of the parish in 1871 was 1815.

ESHREF, or ASHREF, a town of Persia in the province of Mazanderan, about 50 miles west of Astrabad, and 5 miles inland from the Caspian Sea. It lies in a hollow of the mountains richly embowered with cypress, orange, and melon trees. The inhabitants, who number about 5000 or 6000, comprise, according to Napier, the descendants of a Georgian colony introduced by Shah Abbas Sefawi, some families of Talish and Tats (the former a Turkish, the second a Persian tribe), and a number of Godars, a peculiar pariah race, possibly of Indian origin. Foreign trade, especially with Constantinople and Astrakhan, is carried on by means of the port of Mashhad-i-Sar, about 50 miles to the N.W., the exports being cotton, sugar, and cutlery, and the imports iron vessels and crockery. The principal buildings are the two dilapidated royal palaces. They were built in a style of great magnificence by Shah Abbas, and after a conflagration were restored by Shah Nadir, the conqueror of Delhi. The third palace of Sefabad, situated on an eminence above the town, has been replaced by a modern building in the European style.

For details see *Erinnerungen aus dem Leben des K. Russischen Gen.-Lieut. Johann von Blaraberg*, 1874, quoted in Petermann's *Mittheil.*, 1875; and Napier's "Diary of a Tour in Khorassan," in *Journ. of Roy. Geog. Soc.*, 1876.

ESKI-DJUMA, or ESKI-DJUMUA, a town of Bulgaria, in the sanjak of Rustchuk, about 22 miles west of Shumla, on the northern slopes of the Binar-dagh. It has several mosques and baths, and derives great local importance from its fairs, of which the greatest, in May, is attended by a vast concourse of merchants from north and south, and displays a variety of German, French, Swiss, and Russian goods.

See Hilberg, *Nach Eski Djumua, mit Bericht über die Messe von Eski Djumua im Mai 1876 von s. Exc. Gr. Edmund Zechy*, Vienna, 1876.

ESKILSTUNA, a town of Sweden in the government of Södermanland, and district of Nyköping, on the Hjelmars-Åa, which unites Lake Hjelmars with Lake Malar. It is the principal centre of Swedish manufacturing industry, possessing a royal musket-factory, engineering works, cutlery establishments, needle factories, dye-works, and tanneries. The place is mentioned in the 13th century, and is said to derive its name from an English missionary called Eskil who suffered martyrdom and was buried on the spot. It rose into importance in the reign of Charles X., who bestowed on it considerable privileges and gave the first impulse to its manufacturing activity. Population 6130.

ESKIMO, ESKIMOS, or ESQUIMAUX, the name applied by European ethnologists to a large number of cognate but widely separated tribes, which are scattered along the coasts of the arctic regions of America and Asia. The Danish form of the word has recently supplanted the older French form. The name is a corruption of the Abenaki Indian *Eskimat-sic* or the Ojiba *Askimeg*, both terms meaning "those who eat raw flesh." The native name is *Innuït*—a word signifying, as names of savage tribes frequently do, "The people." The Eskimo constitute a very homogeneous race, and are the widest spread aboriginal people in the world. They are entirely unknown in Europe, being confined to the arctic coast of America, and a small portion of the Asiatic shore of Behring Strait. On the American shores they are found, in broken tribes, from East Greenland to the western shores of Alaska,—never far off the coast, or south of the region where the winter ice allows seals to congregate in large numbers. They thus stretch for 3200 miles from S.E. to S.W.; and though in all likelihood they have little intercourse with each other, yet, judging from the traditions, the separate tribes must have maintained their present characteristic language and mode of life for at least 1000 years. Most probably, like the rest of the aborigines of the New World, they came from Asia at some very

remote period. The N.W. American Coast Indians, whose modes of life are much the same as the Eskimo, bear a striking resemblance to them in appearance. The Eskimo may thus have been fishing Indians, who formerly lived on the banks of the great rivers which flow into the Polar Ocean, and were gradually driven seaward by the more southern Indians, against whom they to this day maintain a violent enmity. In the course of their migrations they arrived in Grinnell Land, crossed Smith Sound, not further north than Cape Union, according to Nares, then advanced gradually southward along the west coast of Greenland, doubled Cape Farewell, and spread up the east coast as far north as man has yet reached. They may have rounded, with the musk ox and the lemming, the north end of Greenland, but the probabilities are in the direction indicated. Even on hunting expeditions they rarely withdraw more than 20 miles from the coast, and only in very exceptional cases 30 miles. Save a slight admixture of European settlers, they are the only inhabitants of both sides of Davis Strait and Baffin's Bay. They extend as far south as about 50° N. lat. on the eastern side of America and in the west to 60° on the eastern shore of Behring Strait, while 55° to 60° are their southern limits on the shore of Hudson's Bay. Throughout all this range no other tribes intervene, except in two small spots on the coast of Western America, where the Kennayan and Ugaleza Indians come down to the shore for the purpose of fishing. The Aleutians are closely allied to the Eskimo in habits and language, though their culture is somewhat more highly developed. Rink divides them into the following groups, the most eastern of which would have to travel nearly 5000 miles to reach the most western.

1. The East Greenland Eskimo, few in number, every year advancing further south, and having intercourse with the next section.
2. The West Greenlanders, civilized, living under the Danish crown, and extending from Cape Farewell to 74° N. lat.
3. The Northernmost Greenlanders—the Arctic Highlanders of Ross—confined to Smith, Whale, Murchison, and Wolstenholme Sounds, north of the Melville Bay glaciers, not extending to the western shores of the former strait, nor within the memory of man having any intercourse with those south of them. They are very isolated, have greatly decreased of late years, did not until recently possess the kayak or skin-covered canoe, the umiak or open skin boat, or the bow and arrow, are bold hunters, pagans, and are perhaps the most typical of the Eskimo in Greenland; they have not of recent years greatly decreased, though at present they do not number more than 200.
4. The Labrador Eskimo, mostly civilized.
5. The Eskimo of the middle regions, occupying the coasts from Hudson's Bay to Barter Island, beyond Mackenzie River—perhaps comparatively a rather heterogeneous group, inhabiting a stretch of country 2000 miles in length and 800 in breadth.
6. The Western Eskimo, from Barter Island to the western limits in America. They differ somewhat from the other groups in various habits, such as the use of the baidar or double-manned skin-covered canoe, in the clothing of the men, in their labrets, and in the head-dress of the women. They are allied to the Aleutians and the Indians of Alaska.
7. The Asiatic Eskimo or Tuski, who are again nearly allied to the Namollo and Itelmes. None of the Arctic tribes of Europe or Asia have the slightest connexion with them. Of all the Eskimo those of Greenland and Labrador are the best known; the others are known but partially.

¹ A party of Eskimo from the western side of Smith Sound, about Cape Isabella, crossed over in an umiak and five kayaks, about five years before the survivors of the crew of the "Polaris" wintered there in 1872-3. They introduced the use of the bow and arrow, hitherto unknown among the "Arctic Highlanders."

Appearance and Dress.—The Eskimo are not so small as they are usually represented, their height—5 feet 4 inches to 5 feet 10 inches, and in rare cases even 6 feet—being quite up to the average of the coast Indians. Their dress, however, gives them a dwarfish appearance. Both men and women are muscular and active, the former often inclining to *embonpoint*, and both having a pleasing, good-humoured, and not unfrequently, even handsome cast of countenance, apt to break into a "grin" on very small provocation. The face is broadly oval, flat, with fat cheeks; forehead not high, and rather retreating; teeth good, though, owing to the character of the food, worn down to the gums in old age; nose very flat; eyes rather obliquely set, small, black, and bright; head largish, and covered with coarse black hair, which the women fasten up into a top knot on their crown, and the men clip in front and allow to hang loose and unkempt behind. Their skulls are of the mesocephalic type, the height being greater than the breadth; according to Davis, 75 is the index of the latter and 77 of the former. Some of the tribes slightly compress the skulls of their new-born children laterally (Hall), but this practice is a very local one. The men have usually a slight moustache, but no whiskers, and rarely any beard. The skin has generally a "bacony" feel, and when cleaned of the smoke, grease, and other dirt—the accumulation of which varies according to the age of the individual—is only so slightly brown that red shows in the cheeks of the children and young women. The people soon age, however. Their hands and feet are small and well formed, and, as a rule, they have a more pleasing appearance than all except the best-looking Indian tribes. The women and children dress entirely in skins of the seal, reindeer, bear, dog, or even fox, the first two being, however, the most common. The men and women's dress is much the same. The jacket of the men has a hood, which in cold weather is used to cover the head, leaving only the face exposed; it must be drawn over the head, as it has no opening in front or behind. The women's jacket has a fur-lined "amowt" or large hood for carrying a child, and an absurd looking tail behind, which is, however, usually tucked up. The trousers are either tight or loose, and are fastened into boots made of prepared seal skin, very ingeniously and neatly made. The women's trousers are usually ornamented with eider duck necks, or embroidery of native dyed leather; their boots, which are of white leather, or (in Greenland) dyed of various colours, reach over the knees, and in some tribes are very wide at the top, thus giving them an awkward appearance and a clumsy waddling walk. In winter there are two suits of clothes of this description, one with the hair inside, the other with it outside. They also sometimes wear shirts of bird-skins, and stockings of dog or young reindeer skins. The boots require to be changed when wet, otherwise they would freeze hard in cold weather. Their clothes are, like all the Eskimo articles of dress or tools, very neatly made, fit beautifully, and are sewn with "sinew-thread," with a bone needle if a steel one cannot be had. In person the Eskimo are usually filthy, water not often coming in contact with them unless accidentally. The children when very young are, however, sometimes cleaned by being licked with their mother's tongue before being put into the bag of feathers which serves as their bed, cradle, and blankets.

Dwellings, Occupations, Characteristic Implements, and Food.—In summer the Eskimo live in conical skin tents, and in winter usually in half-underground huts (*igloos*) built of stone, turf, earth, and bones, entered by a long tunnel-like passage, which can only be traversed on all fours. Sometimes, if residing temporarily at a place, they will erect neat round huts of blocks of snow with a sheet of ice for a window. These, however, though comfortable

in the winter, become damp and dripping in the spring, and are then deserted. In the roof are deposited their spare harpoons, &c.; and from it is suspended the steatite basin-like lamp, the flames of which, the wick being of moss, serves as fire and light. On one side of the hut is the bench which is used as sofa, seats, and common sleeping place. The floor is usually very filthy, a pool of blood or a dead seal being often to be seen there. Ventilation is almost non-existent; and after the lamp has blazed for some time, the family having assembled, the heat is all but unbearable: the upper garment must be taken off, and the unaccustomed visitor gasps half asphyxiated in the mephitic atmosphere. In the summer the wolfish-looking dogs lie outside on the roof of the huts, in the winter in the tunnel-like passage just outside the family apartment. The Western Eskimo build their houses chiefly of planks, merely covered on the outside with green turf. The same Eskimo have, in the more populous places, a public room for meetings. "Council chambers" are also said to exist in Labrador, but are only known in Greenland by tradition. Sometimes in South Greenland and in the Western Eskimo country the houses are made to accommodate several families, but as a rule each family has a house to itself.

The Eskimo are solely hunters and fishers, and derive most of their subsistence from the sea. Their country will allow of no cultivation worth attending to; and beyond a few berries, roots, &c., they use no vegetable food. They are essentially sarcophagous. The seal, the reindeer when obtainable, and various cetaceous animals supply the bulk of their food, as well as their clothing, light, fuel, and frequently also, when driftwood is scarce or unavailable, the material for various articles of domestic economy. The shuttle-shaped canoe or *kayak*, covered with hairless seal-skin stretched on a wooden or whalebone frame, with only a hole in the centre for the paddler, is one of the most characteristic Eskimo implements. The paddler propels it with a bone-tipped double-bladed paddle, like that used in the "canoes" familiar as aquatic playthings in England. He is covered with a waterproof skin or entrail dress, tightly fastened round the mouth of the hole in which he sits, so that, should the canoe overturn, not a drop of water may enter. A skilful kayaker can turn a complete somersault, boat and all, through the water. The *umiak* or flat-bottomed skin luggage-boat, rowed by the women, is another, though less interesting, Eskimo vessel. The sledge, made of two runners of wood or bone—even, in one case on record, of frozen salmon (Maclure)—united by cross bars tied to the runners by hide thongs, and drawn by from 4 to 8 dogs harnessed abreast, is another article of Eskimo domestic economy which no European ingenuity has ever been able to improve. Some of their weapons afford remarkable evidence of inventive skill,—in particular, the harpoon, with the point detachable after it has struck the seal, narwhal, or white whale; the line to which the harpoon is fastened, with the inflated sealskin at the end, which tires out the prey, besides marking its course, and buoys it up when dead; the bird-spears, with bladder attached, and the adventitious side-points which strike the animal should the main one miss it; the rib bow of the wild Eskimo, &c. Although they have to maintain a severe struggle for existence against the elements, the Eskimo have been able, in the manufacture of their tools, to develop artistic and mechanical skill far surpassing that of savages more favourably situated, but less endowed with brain power. They sometimes cook their food by boiling, but, when it is frozen, never hesitate to devour it raw. Blood, and the half-digested contents of the reindeer's paunch, are also eagerly consumed by them; but it is a mistake to suppose that they habitually eat blubber. Fat they are no doubt fond of, but blubber

is too precious: it must be kept for winter fuel and light. They are enormous eaters; two Eskimo will easily dispose of a seal at a sitting; and in Greenland, for instance, each individual has for his daily consumption, on an average, 2½ lb of flesh with blubber, and 1 lb of fish, besides mussels, berries, sea-weed, &c., to which in the Danish settlements may be added 2 oz. of imported food. Ten pounds of flesh, in addition to other food, is not uncommonly consumed in a day in time of plenty. A man will lie on his back and allow his wife to feed him with tit-bits of blubber and flesh until he is unable to move.

The Eskimo cannot be strictly called a wandering race; they are nomadic only in so far that they have to move about from place to place during the fishing and shooting season, following the game in its migrations. They have, however, no regular property. They possess only the most necessary utensils and furniture, with a stock of provisions for less than one year; and these possessions never exceed certain limits fixed upon by tradition or custom (Rink). Long habit and the necessities of their life have also compelled those having food to share with those having none,—a custom which, with others, has conduced to the stagnant condition of Eskimo society and to their utter improvidence.

Moral and Mental Character.—So far as a nation can be characterized in a few words, it may be said that the Eskimo are, if not in the first rank of barbarous races, not in the last, and that, though they want some of the mental endowments of races like the Polynesians, they are equally free from many of their vicious traits. Their intelligence is considerable, as their implements and folk-tales abundantly prove. They display a taste for music, cartography, and drawing, display no small amount of humour, are quick at picking up peculiar traits in strangers, and are painfully acute in detecting the weak points or ludicrous sides of their character. They are excellent mimics, and easily learn the dances and songs of the Europeans, as well as their games, such as chess and draughts. They gamble a little,—but in moderation, for the Eskimo, though keen traders, have a deep-rooted antipathy to speculation. When they offer anything for sale—say at a Danish settlement in Greenland—they always leave it to the buyer to settle the price. They have also a dislike to bind themselves by contract. Hence it was long before the Eskimo in Greenland could be induced to enter into European service, though when they do so now-a-days they pass to almost the opposite extreme—they have no will of their own. It is affirmed by those who ought to know that any sort of licentiousness or indecency which might give rise to public offence is rare among them. In their private life their morality is, however, not high. The women are especially erring; and in Greenland, at places where strangers visit, their extreme laxity of morals, and their utter want of shame, are not more remarkable than the entire absence of jealousy or self-respect on the part of their countrymen and relatives. Theft in Greenland is almost unknown; but the wild Eskimo make very free with strangers' goods—though it must be allowed that the value they attach to the articles stolen is some excuse for the thieves. Among themselves, on the other hand, they are very honest,—a result of their being so much under the control of public opinion. Lying is said to be as common a trait of the Eskimo as of other savages in their dealings with Europeans. They have naturally not made any figure in literature. Their folk-lore is, however, extensive, and that collected by Dr Rink shows considerable imagination and no mean talent on the part of the story-tellers. In Greenland and Labrador most of the natives have been taught by the missionaries to read and write in their own language. Altogether, the literature published in the Eskimo tongue is considerable. Most of it has been printed in Denmark,

but some has been "set up" in a small printing office in Greenland, from which about 280 sheets have issued, beside many lithographic prints. A journal (*Atuagagdliutit nalinginarmik tusaruminaassumik univkat*, i.e., "something for reading, accounts of all entertaining subjects") has been published since 1861. Up to 1874 it extended to 194 sheets in 4to, and about 200 leaves with illustrations. Two Eskimo have appeared as authors on a small scale, the last being Hans Hendrik, who has published an autobiography, narrating his life among the Smith Sound Eskimo, and as the hunter of the expeditions of Kane, Hayes, Hall, and Nares. Some of them pick up handicrafts very readily, and those who have wrought in the Copenhagen workshops are said by their employers to learn various kinds of labour more rapidly than average Danish youths of the same age.

Religion.—The Eskimo nearly everywhere hold the same religious ideas, though in Greenland and Labrador they are, with few exceptions, nominally at least, Christians. The whole world is, according to the pagan Eskimo's belief, governed by *inua*s, supernatural powers or "owners," each of whom holds his sway within natural limits. Any object or individual may have its, his, or her *inua*, though generally speaking the idea of an *inua* is limited to certain localities or passions—such as a mountain or lake, or strength or eating. The soul, for instance, is the *inua* of the body. The earth and the sea rest on pillars, and cover an under-world accessible by various mountain clefts, or by various entrances from the sea. The sky is the floor of an upper-world to which some go after death, while others—good or bad—have their future home in the under-world. Here are the dwellings of the *arsissut*—the people who live in abundance. The upper one, on the contrary, is cold and hungry; here live the *arsartut* or ball-players, so called from their playing at ball with a walrus head, which gives rise to the aurora borealis. The mediums between the *inua* and mankind are the *angakoks* (Esk. plur., *angakut*) or wizards, who possess the peculiar gift of *angakoonek*—or the state of "being angakok"—which they have acquired by the aid of guardian spirits called *tornat* (plural of *tornak*), who again are ruled by *tornarsuk*, the supreme deity or devil of all. Such is their religion in the barest possible outline. They also invoke a supernatural influence which is called *kusinek* or *iliseenek*, which may be translated as witchcraft: this is believed to be the mystic agency which causes sudden sickness or death. In the folk-lore of the Greenlanders as of other nations, divine justice manifests itself chiefly in the present life, though they have a faint belief in reward or punishment in the future world, according as the individual has behaved in this.

Language.—The idiom spoken from Greenland to North-eastern Siberia is, with a few exceptions, the same; any difference is only that of dialect. It differs from the whole group of European languages, not merely in the sound of the words, but more especially, according to Rink, in the construction. Its most remarkable feature is that a sentence of a European language is expressed in Eskimo by a single word constructed out of certain elements, each of which corresponds in some degree to one of our words. One specimen commonly given to visitors to Greenland may suffice: *Savigiksinariartokasuaromaryotillogog*, which is equivalent to "He says that you also will go away quickly in like manner and buy a pretty knife." Here is one word serving in the place of 17. It is made up as follows:—*Savig* a knife, *ik* pretty, *sini* buy, *ariartok* go away, *asuar* hasten, *omar* wilt, *y* in like manner, *otit* thou, *tog* also, *og* he says.

Social Economy.—The Eskimo differ from most other tribes of savages, and notably from those of the rest of

America, by having no chiefs or political and military rulers. Fabricius concisely described them in his day:—"Sine Deo, domino, reguntur consuetudine." The government is mainly a family one, though if a man is distinguished for skill in the chase, strength, shrewdness, or other qualities useful to a wild community, he will no doubt obtain a corresponding influence in the village or settlement. There is also a good deal of dependence of one upon another, as must happen in a people situated as the Eskimo. The family, the inhabitants of a house, and the inhabitants of a wintering place or hamlet are the three subdivisions recognized by the Eskimo; but any connexion between the different wintering places is hardly known and is not recognized. They never go to war with each other; and though revengeful, and apt to injure an enemy secretly, they rarely come to blows, and are morbidly anxious not to give offence. Indeed, in their intercourse with each other they indulge in much hyperbolic compliment, and language courteous from the teeth outwards. But they are not without courage. On the Coppermine and Mackenzie Rivers, where they sometimes come into collision with the Indians, they fight fiercely, and are a name of terror. Polygamy is rare, but the rights of divorce and re-marriage are exercised among the wild Eskimo without any definite restriction. The courtship or marriage customs and the laws of inheritance will be found fully described in the works mentioned in the bibliography. The chief laws are such as the following. Every seal caught at a wintering place should be equally divided as far as it will go. Any one picking up driftwood has only to put some stones on it, as it lies on the shore, to establish his ownership in it. If a seal is harpooned and gets off with the harpoon sticking in it, the first owner loses his right in it if the bladder float gets detached. Any other kind of goods found are the property of the owner. If two hunters at the same time hit a bird, the bird is equally divided between them. All kind of game which is very large or rare is common property. In South Greenland whoever is the first to see a bear has ownership in it, no matter who kills it. The borrower is not bound to give compensation for any injury to the tools of another which he may have borrowed. If a man repent of a bargain he has a right to retract; nothing is sold on credit, or at least without being repaid in a short time. The Greenlanders were always fond of festivals, as are the Eskimo to this day all over their country. When they met each other they used to rub noses together, but this, though a common custom still among the wild Eskimo, is entirely abandoned in Greenland except for the petting of children. There is, in Greenland at least, no national mode of salutation, either on meeting or parting. When a guest arrives or enters a house, commonly not the least sign is made either by him or his host. On leaving a place they now sometimes say "inuvdluaritse," i.e., live well, and to a European "aporniakinatit," i.e., do not hurt thy head, viz., against the upper part of the doorway.

Population.—No precise statement can be made regarding the numbers of the Eskimo race. For Greenland, however, we have exact data so far as the Danish possessions are concerned. In 1870, the date of the last census, there were, from Cape Farewell to the limit of the West Greenland region, 9588 people. Add to this about 200 for Smith's Sound, and say 400 for East Greenland, and the whole population of that island continent—inhabited and habitable on the coast only—will not be many more than 10,000. On an average, the proportion of females to males in Greenland has been 1118 to 1000, while in Iceland it is 1102, and in Denmark and the Faroe Isles there are 1018 to 1000 males. The natives of Greenland have decreased since the Danes came into the country, and at present the population is at a stand-still. On a rough estimate, the

whole Eskimo race does not, it is believed, exceed 40,000. But we have really no data, except at spots where they have come in contact with Europeans.

Bibliography.—Fragmentary notices of the Eskimo may be found in numerous works. We need only take cognizance here of modern writers who have actually lived among the Eskimo. These are:—Rink, *Eskimoiske Eventyr og Sagn* (1866); Supplement to the same work (1871); *Tales and Traditions of the Eskimo* (1875); *Danish Greenland: its People and its Products* (1877); *Grönland, geographisk og Statistisk beskrevet*, 2 vols. (1857); *Om Eskimoernes Herkomst* (Aarborg for Nord. Oldk. og Hist. 1871, pp. 269–302); Richardson, *Polar Regions* (1861), pp. 298–331; Markham, *Arctic Papers of the R. G. S.* (1875), pp. 163–232; Simpson, *Ibid.*, pp. 233–275; *Hans Hendriks the Eskimo's Memoirs* ("Geographical Magazine," Feb. 1878, et seq.); Brown, *Races of Mankind*, vol. i. (1872), pp. 5–20; *Countries of the World*, vol. i. (1877), pp. 123–144. See also the works and papers referred to in the foregoing works; the dictionaries and grammars of Fabricius, Washington, Kleinschmidt, and Jansen, and a sketch of the Eskimo language by Dr Rink in course of publication by the Smithsonian Institution; and finally the various narratives and other official reports and papers of the Arctic voyagers, particularly those of Parry, Lyons, Franklin, Collinson, McClure, Graah, Kane, Rae, Hayes, Hall, Bessels, Koldewey, and Nares. (R. B.)

ESKISAGRA, or **ESKI-ZAGRA**, a town of European Turkey, province of Adrianople, is pleasantly situated on the southern slope of the Balkans, 70 miles N.W. of Adrianople. The vicinity is highly cultivated, and there are some well frequented hot mineral baths. Eski-Sagra has 13 mosques, several Christian churches, and a bazaar. Its principal manufactures are carpets, coarse cloth, and leather. In the Russo-Turkish war of 1877, while occupied by the Russians, it was threatened by the Turks under Suleiman Pasha, and General Gourko advancing to its relief suffered a disastrous defeat (July 31). The Russians were compelled to evacuate the town, and retire through the Lower Balkans, after which it was set on fire by the Turks, and great barbarities were perpetrated on the Christian inhabitants. The population of the town numbered about 20,000.

ESKI-SHEHR, a town of Asiatic Turkey, in Asia Minor, in the sanjak of Sultan Oegni, about 80 miles S.E. of Broussa, and 130 miles W.N.W. of Angora, to the south of the Purssak-Chai, a tributary of the Sangarius, in 30° 32' E. long. and 39° 43' N. lat. It consists of two portions, the town proper and the market-town, united by a causeway about a mile and a half in length. There are at least eight or ten mosques; and the market town contains three or four natural warm baths, which are mentioned as early as the 3d century by Athenæus. About 18 miles to the east are extensive deposits of meerschaum, which yield a yearly revenue to the Government of about 60,000 piastres. The clay is partly manufactured into pipes in the town; but the greater proportion finds its way to Europe and especially to Germany. The annual export is estimated at 2200 or 2500 chests, of a total value of 35 millions piastres. Eski-Shehr, i.e., the old town, is identified with the ancient Dorylaeum of Phrygia, and it still preserves some sculptures of the Roman period. Its name appears about 302 B.C., in connection with the wars of Lysimachus and Antigonus; and it is frequently mentioned by the Byzantine historians as an imperial residence and military rendezvous. In 1097 it was the scene of the defeat of the Turks under Kildj-Arslan by the crusaders under Geoffrey of Bouillon.

ESNEH, or **ISNE**, the Latopolis of the Greeks, a town of Upper Egypt, on the left bank of the Nile, 28 miles S.S.W. of Thebes, in 25° 17' 38" N. lat. and 33° E. long. Its position at the upper end of the Nile valley, which here widens out to a breadth of 4½ miles, is greatly in its favour, and it forms an important dépôt in the caravan trade from Sennaar. The local manufactures are shawls, cottons, and pottery. It has frequently served as a place of refuge for the political exiles of southern Egypt, and at the time of the French expedition it was occupied by the

Mamelukes of Hassan, Osman, and Saleh Bey. More recently it has been the custom to transport thither female offenders from Cairo. To the south of the town lies a Coptic monastery which attracts a large number of pilgrims from far and near to visit the relics of the martyrs who were put to death at Esneh during the Diocletian persecution, 303 A.D. The population of the town is estimated at 30,000. For an account of the ancient temple of Kneph, see EGYPT, vol. vii., p. 782.

ESPARTO, or **SPANISH GRASS**, *Macrochloa* (*Stipa*, L.) *tenacissima*, Kunth, is a plant of the tribe *Stipeæ*, resembling the ornamental feather-grass of gardens. It is indigenous to the south of Spain and the north of Africa, and is especially abundant in the sterile and rugged parts of Murcia and Valencia, and in Algeria, flourishing best in sandy, ferruginous soils, in dry, sunny situations on the sea coast. Pliny (*N. H.* xix. 2) described what appears to have been the same plant under the name of *spartum*, whence the designation *campus spartarius* for the region surrounding New Carthage. (See **CARTAGENA**, vol. v. p. 140.) It attains a height of three or four feet. The stems are cylindrical, and clothed with short hair, and grow in clusters of from two to ten feet in circumference; when young they serve as food for cattle, but after a few years' growth acquire great toughness of texture. The leaves vary from six inches to three feet in length, and are grey-green in colour; on account of their tenacity of fibre and flexibility they have for centuries been employed for the making of ropes, sandals, baskets, mats, and other articles. Ships' cables of esparto, being light, have the quality of floating on water, and have long been in use in the Spanish navy. Esparto leaves contain 56 per cent. by weight of fibre, or about 10 per cent. more than straw, and hence have come largely into requisition as a substitute for linen rags in the manufacture of paper. For this purpose they were first utilized by the French, and in 1857 were introduced into Great Britain. In 1877 the total imports of esparto into the United Kingdom were 174,720 tons, being 43,809 tons in excess of the quantity imported in the previous year. When required for paper-making the leaves should be gathered before they are quite matured; if, however, they are obtained too young, they furnish a paper having an objectionable semi-transparent appearance. The leaves are gathered by hand, and from two to three hundredweight may be collected in a day by a single labourer. They are generally obtained during the dry summer months, as at other times their adherence to the stems is so firm as often to cause the uprooting of the plants in the attempt to remove them. Esparto may be raised from seed, but cannot be harvested for twelve or fifteen years after sowing. The increased demands of the paper trade have led to forced cropping in some districts, where in consequence there has been a falling off of from 2 to 10 per cent. in production. For the processes of the paper manufacturer esparto is used in the dry state, and without cutting; roots and flowers and stray weeds are first removed, and the material is then boiled with caustic soda, washed, and bleached with chlorine solution. Sundry experiments have been made to adapt esparto for use in the coarser textile fabrics. Messrs A. Edger and B. Proctor (see *Chem. News*, vol. xxxv. p. 141, 1877) have directed attention to the composition of the slag resulting from the burning of esparto, which they find to be strikingly similar to that of average medical bottle glass, the latter yielding on analysis 66.3 per cent. of silica and 25.1 per cent. of alkalis and alkaline earths, and the slag 64.6 and 27.45 per cent. of the same respectively. For further details concerning the manufacture of paper from esparto, see the article **PAPER**.

ESPINASSE. See **L'ESPINASSE**.