mucous membrane of the jaws, palate, tongue and lips, these arc truthfully reproduced in a plastic material. The ordinary glass eyes arc discarded, and hollow globes, specially made, are hand-painted from nature, and arc fixed in the head so as to convey the exact expression which the pose of the body demands. Birds, if of any size, can be modelled in like manner, and fishes are treated by a nearly identical process, being finally coloured as in a “ still life ” painting.

To give a life-like representation, attention is also paid to artistic “mounting.” By this is meant the surrounding of specimens with appropriate accessories, and it is well exemplified by the work shown in the natural history museum at South Kensington, where, for example, birds are arranged as in a state of nature.

The great American museums have extended a similar method to the mounting of even large mammals, whilst they have made bird groups naturally still more life-like by panoramic back­grounds and top and side lighting of the cases. (Μ. B.)

TAY, the longest river in Scotland. From its source in Ben Lui (3708 ft.), a mountain on the borders of Perthshire and Argyllshire, it pursues a mainly north-easterly direction to Logierait, where it curves to the south by east as far as Dunkeld; there its course turns to the south-east to the mouth of the Isla, where it bends towards the south by west to the vicinity of Scone. From this point it makes a sharp descent to the south by east beyond the county town, when it sweeps south­east to near Newburgh in Fifeshire, where it again faces the north-east as far as Broughty Ferry, whence it flows straight eastwards into the North Sea, off Buddon Ness in Forfarshire, after a total run of 117 miles. During the first 11 miles it is known as the Fillan and discharges into Loch Dochart. From the lake it emerges as the Dochart (13 m.), which enters Loch Tay at Killin. Flowing through the loch for 14½ m., it issues at Kenmore under its proper name of Tay. From hence to the sea its course measures 78½ m., from which we may deduct 25 m. as the length of the Firth of Tay (which begins at Cairnie- pier Ferry), leaving 53½ m. as the length of the stream between Kenmore and the mouth of the Earn. Its principal affluents on the right are the Bran, Almond and Earn, and on the left the Lyon, Tummel and Isla. Along with its tributaries, therefore, it drains all Perthshire and portions of Forfarshire and Argyll­shire, having a catchment basin of 2400 sq. m. In many parts the current is impetuous, and in flood has occasionally wrought much havoc, certain of the inundations being historically important. Its mean discharge of water every minute is estimated to amount to 273,000 cubic ft., a larger outpour than that of any other stream in the United Kingdom. Vessels make Dundee at all stages of the tide, and the estuary is navig­able to Newburgh by vessels of 500 tons, and as far as Perth by ships of 200 tons. The navigation, however, is seriously obstructed by shifting sandbanks. The estuary varies in width from ½ m. at Cairniepier Ferry to fully 3 m. at its mouth. The principal points on the river are Crianlarich on the Fillan (with stations on the West Highland and Callander to Oban railways), Luib and Killin on the Dochart, Kenmore, Aberfeldy, Dunkeld, Birnam, Stanley, Scone, Perth and, on the north shore of the firth, Errol, Dundee, Broughty Ferry and Monifieth, and, on the south shore, Newburgh, Newport and Tayport. It is bridged at Kenmore, Aberfeldy, Logierait, Dunkeld, Caputh and Perth (3). The first railway viaduct across the firth at Dundee was nearly two miles long and had been in use for some eighteen months from the date of its opening in 1877. During the night of the 28th of December 1879, however, while a great gale was at the height of its fury, the passing of a train over the central section gave purchase to the tempest and that portion of the structure was blown down along with the train and the unfortunate travellers. Some 75 to 90 persons are supposed to have perished. The second bridges of somewhat lower height, 2 m. and 73 yds. in length, was erected 60 ft. higher up stream and opened in 1887. The Tay is famous for salmon, the annual catch in the river and estuary being the most valuable in Scotland. There is a hatchery at Hormontfield, close to Luncarty station, 4 m. N. of Perth, for the artificial breeding of salmon, the fish being liberated from the ponds about the age of three years. In respect of riparian scenery the Tay as a whole is the most beautiful river in Scotland, the stretch between Logierait and Cargill, particularly the reaches above and below Dunkeld, being universally admired.

**TAY, LOCH,** the largest lake in Perthshire, Scotland. It is situated about the middle of the county and has a flattened ogee form, with a general trend from N.E. to S.W. It is 14⅛ m. long from Killin at the head to Kenmore at the foot, from ½ m. to fully 1 m. wide. The maximum depth is 508 ft., the mean depth 200 ft. The lake lies 355 ft. above the sea, covers an area of 6550 acres, or over 10 sq. m., and has a drainage basin of 232 sq. m., including the overflow from Lochs Dochart and Tubhair. It receives at Killin the rivers Lochay and Dochart and discharges by the Tay at Kenmore. Ben Lawers (3984 ft.) rises near the left bank. There are piers at Killin, Ardeonaig, Lawers, Fernan and Kenmore, at which the steamers call during the tourist season; ferries at Ardeonaig and Lawers; and a coaching road on the left shore and a somewhat longer and more hilly road on the right. At the foot of the lake is an island containing the ruins of the priory which was founded in 1121 by Alexander I. in memory of his wife Sibylla, daughter of Henry I. She was buried here. Loch Tay enjoys great repute for its salmon-fishing.

**TAYABAS,** a town of the province of Tayabas, Luzon, Philippine Islands, 8 m. N. of Lucena, the capital. Pop. of the municipality (1903) 14,740. Tayabas is picturesquely situated on the slopes of the extinct volcano Banájao, and commands a magnificent view of the surrounding country, which is extremely fertile, and is planted in rice and coco-nuts. Its climate, although cool, is very unhealthy, malignant malarial fevers causing a high death-rate. It has a church and convent of large size and massive construction. During the revolt of 1896 a Spanish garrison occupying these buildings withstood a siege of fifty-eight days, at the end of which time it was forced to surrender by lack of food. Tagalog and Bicol are the languages spoken. Until 1901 Tayabas was the capital of the province.

**TAYGETUS** (Tαvγeτos or *Υaυyeτov,* mod. St Elias or Pente- daktylon), the highest mountain ridge in the Peloponnese, separating Laconia from Messenia. Height 7900 ft. The highest point is H. Elias; here horses are said to have been sacrificed to Helios.

**TAYLOR, ANN** (1782-1866), afterwards Mrs. Gilbert, and **TAYLOR, JANE** (1783-1824), English writers for children, daughters of Isaac Taylor (1759-1829), were bom in London on the 30th of January 1782 and the 23rd of September 1783 respectively. In 1786 the Taylors went to live at Lavenham in Suffolk, and ten years later removed to Colchester. Jane was a lively and entertaining child, and composed plays and poems at a very early age. Their father and mother held advanced views on education, and under their guidance the girls were instructed not only in their father’s art of engraving, but in the principles of fortification. Their poems were written in short intervals in the round of each day’s occupations. Ann introduced herself to the publishers Darton and Harvey by a rhymed answer to a puzzle in the *Minor’s Pocket Book* for 1799, and Jane made her first appearance in print in the same periodical with “ The Beggar Boy.” The publishers then wrote to Isaac Taylor asking for more verses for children from his family, and the result was *Original Poems for Infant Minds* (2 vols., 1804-5), by “ several young persons,” of whom Ann and Jane were the largest contributors. The book had an immediate and lasting success. It went through numerous editions, and was translated into German, Dutch and Russian. Ann and Jane Taylor wrote directly for children, and viewed events and morals from the nursery standpoint. They had many imitators, but few serious rivals in their own kind, except perhaps Mrs Elizabeth Turner. They followed up this success with *Rhymes for the Nursery* (1806), *Hymns for Infant Minds* (1808, 2nd ed. 1810), a less-known collection, *Signor Topsy*