**SUNDSVALL,** a seaport of Sweden in the district *(län)* of Vesternorrland, on a wide bay of the Baltic, at the north of the Selånger River, 360 m. N. by W. of Stockholm, the terminus of a branch from Ange on the northern railway. Pop. (1900), 14,831. It was rebuilt in brick and stone after *a* destructive fire in 1888. In the town and its vicinity are numerous steam saw-mills, besides wood-pulp factories, steelworks, brickworks, engineering shops, breweries and joineries, but Sundsvall owes its chief importance to its export trade in timber (6 to 7 million cub. ft. annually), the bulk of which goes to Germany, France and Great Britain. It also exports wood-pulp, iron and fish. There is a special trade with Finland. The harbour, which is usually closed by ice from about the middle of December to the second week in May, is sheltered against the east winds by a group of islands.

**SUNFISH,** a name chiefly and properly applied to a marine fish *(Orthagoriscus)* of the order Plectognathi, which by its large size, grotesque appearance and numerous peculiarities of organi­zation has attracted the attention equally of fishermen as of naturalists. Only two species are known, the rough or short sunfish (0. *mola),* which is found in all seas of the temperate and tropical zones; and the smaller and scarcer smooth or oblong sunfish *(O. truncatus),* of which only a small number of specimens have been obtained from the Atlantic and Indian oceans.

Sunfishes have the appearance of tailless fish. This is due to the extreme shortening of the caudal region which is sup­ported by only a few short vertebrae; the caudal fin is absent, what appears to be a tail being formed by the confluence of dorsal and ventral fins: pelvic fins are also wanting. The anterior parts of the dorsal and ventral fins are high and broad, similar to each other in size and triangular in form. The head is com­pletely merged in the trunk, the boundary between them being indicated only by a very small and narrow gill-opening and a comparatively small pectoral fin. This fin can be of but little use in locomotion, and the horizontal and vertical movements of the fish, as well as the maintenance of its body in a vertical position, are evidently executed by the powerful dorsal and anal fins. The small mouth, situated in front of the head, is armed with an undivided dental plate above and below, similar to but weaker than the teeth of the globe-fish *(Diodon).*

Sunfishes are truly pelagic, propagating their species in the open sea, and only occasionally approach the coast. During the stormy season they live probably at some depth, but in calm, bright weather they rise and rest or play on the surface with their dorsal fin high above the water. This habit has given rise to the popular name “ sunfish,” a term also sometimes applied to the basking-sbark. In some years the rough sunfish is by no means scarce on the south coast of England and on the Irish coasts, where it appears principally in the summer months. The usual size is from 3 to 4 ft. in length, but this species attains to 7 ft. and more. One of the largest specimens (shown in the figure) was caught near Portland (Dorsetshire) in 1846, and is now in the British Museum; its length is 7 ft. 6 in. The sunfish has no economic value, and is rarely, if ever, eaten.

Whilst the rough sunfish has a granulated, rough, shagreen­like skin, the second species (*O*. *truncatus)* has the surface of the body smooth and polished, with its small dermal scutes arranged in a tesselated fashion. It is oblong in shape, the body being much longer than it is deep. The sides are finely ornamented with transverse silvery, black-edged stripes running downwards to the lower part of the abdomen. It has not been found to exceed 2 ft. in length. Only a few specimens have been captured on the coasts of Europe, at the Cape of Good Hope and off Mauritius.

**SUNFLOWER.** The common sunflower, known botanically as *Helianthus annuus,* a member of the natural order Compositae, is a native of the western United States. It is an annual herb with a rough hairy stem 3 to 12 ft. high, broad coarsely toothed rough leaves 3 to 12 in. long, and heads of flowers 3 to 6 in. wide in wild specimens and often a foot or more in cultivated. Double forms are in cultivation, one *(globosus fιslulosus)* having very large globular heads. The plant is valuable from an economic as well as from an ornamental point of view. The leaves are used as fodder, the flowers yield a yellow dye, and the seeds contain oil and are used for food. It is cultivated in Russia and other parts of Europe, in Egypt and India and in several parts of England hundreds of plants are grown on sewage farms for the seeds. The yellow sweet oil obtained by compression from the seeds is considered equal to olive or almond oil for table use. Sunflower oilcake is used for stock and poultry feeding, and largely exported by Russia to Denmark, Sweden and elsewhere. The genus *Helianthus* contains about fifty species, chiefly natives of North America, a few being found in Peru and Chile. They are tall, hardy annual or perennial herbs, several of which are well known in gardens where they are of easy cultivation in moderately good soil. *H. decapetalus* is a perennial about 5 ft. high with solitary heads about 2 in. across in slender twiggy branchlets; *H. multifiorus* is a beautiful species with several handsome double varieties; *H. ory galis* is a graceful perennial 6 to 10 ft. high, with drooping willow-like leaves and numerous comparatively small yellow flower-heads. *II. atrorubens,* better known as *Harpalium rigidum,* is a smaller plant, 2 to 3 ft. high, the flower heads of which have a dark red or purple disk and yellow rays. There are many fine forms of this now, some of which grow 6 to 9 ft. high and have much larger and finer flowers than the type. Other fine species are *II. giganleus,* 10 to *12* ft.; *II. laeliflorus,* 6 to 8 ft., and *H. mollis,* 3 to 5 ft. *H. tuberosus* is the Jerusalem artichoke.

Since the word “ sunflower,” or something corresponding to it, existed in English literature before the introduction of *Helianthus annuus,* or, at any rate, before its general diffusion in English gardens, it is obvious that some other flower must have been intended. The marigold *(Calendula officinalis)* is considered by Dr Prior to have been the plant intended by Ovid *(Met.* iv. 269-270)—

“...Illa suum, quamvis radice tenetur,

Vertitur ad solem; mutataque servat amorem ”— and likewise the *solsaece* of the Anglo-Saxon, a word equivalent to *solsequium* (sun-following). But this movement with the sun is more imaginary than real, the better explanation for the application of the name to a flower being afforded by the re­semblance to “ the radiant beams of the sun,” as Gerard expresses it. The rock-rose *(Helianthemum vulgare)* was also termed sunflower in some of the herbals from its flowers opening only in the sunshine. *Actinella grandiflora,* a pretty perennial 6 to 9 in. high, from the Colorado mountains, is known as the Pigmy sunflower.