whom Mr Pennant had the account, and who was six feet four inches high, up to the breaſt. The banks are here very high and ſteep ; ſo that had not the rebels been infatuated in ſuch a manner as to neglect: opposition, the paſſage muſt have been attended with conſiderable loſs. On this river there is a great ſalmon- fiſhery ; about 1700 barrels full are caught in the ſeason, and the shore is rented for about 1200 l per *annum.*

SPHACELUS, in ſurgery and medicine, an abſolute and perfect corruption or death of the parts.

SPHÆRANTHUS, in botany: A genus of plants belonging to the class of *ſyngeneſia,* and to the order of *polygamia ſegregata ;* and in the natural ſyſtem arranged under the 49th order, *Compositae.* Each partial calyx contains eight florets ; the florets are tubulated, the fe­male being ſcarcely diſtinguishable. The receptacle is ſcaly ; and there is no pappus. The ſpecies are three, the indicus, africanus, and chinenſis.

SPHAGNUM, bog-moss, in botany ; a genus of plants belonging to the class of *cryptogamia* and order of *musci.* The antheræ are globoſe ; the mouth entire and cloſed by an operculum ; the calyptra is wanting. There are three ſpecies, the paluſtre, alpinum, and ar­boreum, i. The sa*luſtre,* common bog-moſs, grows on our bogs in wide patches, ſo as frequently to cover a large portion of their ſurface. The ſtalks are from two inches to two feet long, irregularly ſurrounded with numerous, conical, pendant branches, and terminated with a rosaceous cluſter of erect ſhort ones. It is gene­rally believed, that the roots and decayed ſtalks of this mois conſtitute a principal part of that uſeful bituminous ſubſtance called p*eat,* which is the chief fuel of the northern regions. —The L'apland matrons are well ac­quainted with this moſs. They dry and lay it in their cradle, to ſupply the place of bed, bolſter, and every covering ; and, being changed night and morning, it keeps the infant remarkably clean, dry, and warm. It is sufficiently soft of itſelf ; but the tender mother, not ſatisfied with this, frequently covers the moss with the downy hairs of the reindeer ; and by that means makes a moſt delicate neſt for the young babe. 2. The *alpi­nurn,* green bog-moss. Its branches are ſubulate and erect; the antheræ are oval. It grows in mountain bogs in South Britain. 3 The *arboreum,* creeping bog- moſs, is branched ; the antheræ are numerous, seſſile, hairy, and grow along the branches chiefly on one side. It is found on the trunks of trees.

Os SPHENOIDES, the ſeventh bone of the crani­um or ſkull. See Anatomy, n⁰ 11.

SPHERE, is a ſolid contained under one uniform round ſurface, every point of which is equally diſtant from a certain point in the middle called its *centre ;* and is formed by the revolution of a ſemicircle about its diameter. See Geometry.

*Projection of the Sphere.* See Projection.

Sphere, in aſtronomy, that concave orb or expanſe which inverts our globe, and in which the heavenly bo­dies appear to be fixed, and at an equal diſtance from the eye.

The better to determine the places of the heavenly bodies in the ſphere, ſeveral circles are ſuppoſed to be deſcribed on the ſurface thereof, hence called the *circles of the ſphere :* of theſe ſome are called *great circles,* as the equinoctial, ecliptic, meridian, &c. and others s*mall circles,* as the tropics, parallels, &c. See Geography ; and Astronomy, *passism.*

*Armillary Sphere.* See Geography.

*Sphere of Activity of a Body,* is that determinate ſpace or extent to which, and no farther, the effluvia conti­nually emitted from that body reach ; and where they operate according to their nature.

SPHERES, in optics, the same with metalline mir­rors, for teleſcopes or other purpoſes. See Mirror.

SPHEROID, in geometry, a ſolid approaching to the figure of a ſphere. It is generated by the entire revolution of a ſemi-ellipſis about its axis. When the revolution is made round the largeſt axis, the ſpheroid is called *prolate ;* and when round the ſhorteſt, *oblate.* This laſt is the figure of the earth, and probably of all the planets.

SPHEX, Ichneumon Wasp, or *Savage ;* a ge­nus of insects belonging to the order of *hymenopterae.* The mouth is armed with entire jaws, but contains no tongue ; the mandibles are horny, crooked, dentated ; the lip horny, the apex membranaceous. The palpi or feelers are four. The antennæ have from 10 to 16 joints. The wings of both ſexes are extended without folds, and laid horizontally on the back. The ſting is ſharp, arid concealed within the abdomen. There are 97 ſpecies, of which two only are natives of Britain and Ireland, the viatica and cribraria. 1. The *viatica* is black : the antennæ are ſhort and thick : the three firſt ſegrnents of the abdomen red-brown : the pedicle is ſhort: the, length half an inch. 2. The *cribraria* is black, with yellow ringlets on the abdomen : the anten­næ are ſhort, and turned backwards : the fore-legs are broad, with an appendix like a shield.

The manner of living is different in the various ſpe­cies, and ſo is the general form of the body and their haunts ; but though the method of life be utterly diffe­rent, yet the ſame manners appear innate and inherent in all. They agree in being the fierceſt of all flies : they will attack infects much larger than themſelves, and this whether they be defenceleſs or armed as they are provided with a ſting. The ſtrength in all this savage kind is great ; their jaws are hard and ſharp, and in their ſting lies a poiſon ſuddenly fatal to the crea­tures with whom they engage. The ſavage ſeizes har­dily on the animal he attacks, and gives a ſtroke of amazing force ; after which he falls down as if himſelf were killed, but it is to rest from his fatigue, and en­joy his victory. He keeps a ſteady eye on the crea­ture he has ſtruck till it dies, which happens in à few minutes, and then drags it to the neſt to feed the young. The number of other insects they deſtroy is ſcarce to be conceived ; the mouth of their cave is like that of a giant in the days of yore, ſtrewed with the remains of prey. The eyes, the filament that serves as a brain, and a ſmall part of the contents of the body, are all the ſavage eats, and will kill 50 for a meal.

SPHINCTER, in anatomy, a term applied to a kind of circular muscles, or muſcles in form of rings, which ſerve to cloſe and draw up ſeveral orifices of the body, and prevent the excretion of the contents.

SPHINX (fab. hiſt.), a monſter which had the head and breaſts of a woman, the body of a dog, the tail of a ſerpent, the wings of a bird, the paws of a lion, and an human voice. It ſprang from the union of Orthos