the reigning passion of their legislator. They were forbid den to remain long encamped in the same place, as well to hinder their being surprised, as that they might be more troublesome to their enemies, by wasting every corner of their country. They slept all night in their armour ; but their outguards were not allowed their shields, that, being unprovided of defence, they might not dare to sleep. In all expeditions they were careful in the performance of reli­gious rites ; and after their evening meal was over, the soldiers sung together hymns to their gods. When they were about to engage, the king sacrificed to the Muses, that, by their assistance, they might be enabled to perform deeds worthy of being recorded to the latest times. The army then advanced in order to the sound of flutes, which played the hymn of Castor. The king himself sung the pæan, which was the signal to charge. This was done with all the solemnity imaginable, and the soldiers were sure either to conquer or die, nor indeed had they any other choice ; for if they fled they were infamous, and in danger of being slain, even by their own mothers, for disgracing their families. In this consisted all the excellency of the Spartan women, who, if possible, exceeded in bravery the men, never lamenting over husbands or sons, if they died honourably in the field, but deploring the shame brought on their house, if either the one or the other escaped by flight. The throwing away a shield also inferred infamy ; and mo­thers, when they embraced their departing sons, were wont to caution them, that they should either return armed as they were, or be brought back so when they were dead ; for, as we have observed, such as were slain in battle were nevertheless buried in their own country. When they put an enemy to flight, they pursued no longer than till victory was certain ; because they would seem to fight rather for the honour of conquering, than of putting their enemies to death. According to their excellent rules of war, they were bound not to spoil the dead bodies of their enemies ; but in process of time, this, and indeed many other of their most excellent regulations, fell into desuetude. He who overcame by stratagem, offered up an ox to Mars ; where as he who conquered by force, offered up only a cock ; the former deed being esteemed more manly than the lat ter. After forty years’ service, a man was exempted from military duty ; and consequently, if they commenced their career at thirty, the Spartans were not considered as invalids till they attained the age of seventy.

SPARTIANUS, Ælius, a Latin historian, who flourished in the reign of Diocletian, about the year 290. He is known as the author of the lives of Hadrian and Ælius Verus ; and to him are likewise ascribed several other lives contained in the collection of “ Historiæ Augustæ Scrip tores.” See Fabricii *Bibliotheca Latina,* tom. iii. p. 95.

SPECIES, in *Logic,* a relative term, expressing an idea which is comprised under some general one called a *genus.*

Species, in *Algebra,* are the letters, symbols, marks, or characters, which represent the quantities in any operation or equation. This short and advantageous way of notation was chiefly introduced by Vieta, about the year 1590; and by means of it he made many discoveries in algebra.

Species, in *Optics,* the image painted on the retina by the rays of light reflected from the several points of the surface of an object, received by the pupil, and collected in their passage through the crystalline, &c. It has been a matter of dispute among philosophers, whether the species of objects which give the soul an occasion of seeing, be an effusion of the substance of the body; a mere impression which they make on all bodies under certain circumstances ; or whether they are not some more subtile body, such as light. The moderns have decided this point by the invention of artificial eyes, in which the species of objects are received on paper, in the same manner as in the natural eye.

SPECIFIC, in *Philosophy,* that which is peculiar to any thing, and distinguishes it from all others.

Species, in *Medicine.* By specifics is not meant such as infallibly and in all patients produce salutary effects. Such medicines are not to be expected, because the opera­tions and effects of remedies are not formally inherent in them, but depend upon the mutual action and reaction of the body and medicine upon each other; hence the various effects of the same medicine in the same kinds of disorders in different patients, and in the same patient at different times. By specific medicines we understand such medicines as are found to be more uniform in their effects than others in any particular disorder.

***SPECIFIC*** *Gravity,* is a term much employed in the discussions of modern physics. It expresses the weight of any particular kind of matter, as compared with the weight of the same bulk of some other body of which the weight is supposed to be familiarly known, and is therefore taken for the standard of comparison. The body generally made use of for this purpose is pure water. See Chemistry and Hydrodynamics.

SPECTACLES, in *Dioptrics,* an instrument consisting of two lenses set in silver, horn, &c. to assist the defects of the organ of sight. Old people, and others who have flat eyes, use convex spectacles, which cause the rays of light to converge so as to meet upon the retina; whereas myopes, or shortsighted people, use concave lenses for spec tacles, which cause the rays to diverge, and prevent their meeting before they reach the retina. See Optics.

SPECTRA, images presented to the eye after removing them from a bright object, or closing them. When any one has long and attentively looked at a bright object, as at the setting sun, on closing his eyes, or removing them, an im age, which resembles in form the object he was attending to, continues some time to be visible. This appearance in the eye we call the ocular spectrum of that object. These ocular spectra are of four kinds: 1st, Such as are ow­ing to a less sensibility of a defined part of the retina, or spectra from defect of sensibility. 2d, Such as are owing to a greater sensibility of a defined part of the retina, or spectra from excess of sensibility. 3d, Such as resemble their object in its colour as well as form; which may be termed direct ocular spectra, 4th, Such as are of a colour contrary to that of their object, which may be termed re verse ocular spectra

SPECTRE, an apparition, or something supposed to be preternaturally visible to human sight, whether the ghosts of dead men or beings superior to man. See Apparitions.

SPECULATIVE, something relating to the theory of some art or science, in contradistinction to practical.

SPECULUM for reflecting telescopes. See Optics and TELESCOPE.

SPEED, John, an English historian, was born at Faring ton in Cheshire, in the year 1542. He was by trade a tailor, and a freeman of the company of merchant tailors in the city of London. In 1606 he published his “ Theatre of Great Britain,” which was afterwards reprinted in folio, under the title of “ The Theatre of the Empire of Great Britain.” In 1614 appeared his “ History of Great Britain;” and in 1616 he published in octavo, “ The Cloud of Witnesses, or, the Genealogies of Scripture.” These genealogies were prefixed to many editions of the English translation of the Bible; and King James gave him a patent for securing the property to him and his heirs. He had twelve sons and six daughters; and died in 1629. He was interred in the church of St. Giles’s, Cripplegate, London, where a monument was erected to his memory.

SPELDHURST, a large parish in the hundred of Washlingstone and county of Kent, thirty-three miles distant from London. A great part of the township of Tunbridge