or local varieties, but such subordinate assemblages are elevated to specific rank, if they appear not to intergrade so as to form a linked species, whilst on the other hand assemblages judged to be species are merged, or degraded to sub-species, if they are found to intergrade by discoveries of linking forms. A species, in short, is a subjective conception, and some writers, as for instance E. Ray Lankester, have urged that the word is so firmly asssociated with historical implications of fixity which are now incongruous with its application, that it ought to be discarded from scientific nomenclature.

In technical biology each species is designated by two words, one for the genus, printed with an initial capital, and one for the particular species, printed without an initial capital in Zoology, whilst in Botany the habit once common to both sub­jects is retained, and the specific name if derived from a proper name is printed with a capital. The two words are printed in italics, and may be followed by the name of the author who first described the species. Thus “ *Canis vulpes* Linnaeus ” is the specific designation of the common fox, *Canis* being the generic term common to dogs, wolves and so forth, and *vulpes* indicating the particular species, whilst the attached author’s name indicates that Linnaeus first named the species in question. ' (P. C. M.)

**SPECIFICATION** (from Med. Lat. *specificatio, specificare,* to enumerate or mention in detail), any detailed statement, especially one on which an estimate or plan is based, as the specification of a builder or architect (see Building). In patent law a specification is a description of an invention. An application for a patent must be accompanied by a specifica­tion, either provisional or complete. If a complete specification does not accompany the application, it must be forwarded usually within six months of the date of application, otherwise the application is deemed to be abandoned. A provisional specification declares the nature of the invention in general terms, while a complete specification describes the invention in detail, and shows the manner in which it is to be carried out (see further Patents).

In the civil law (see Accession) specification was the working up of a thing into a new product; for example, the making of bread from grain. The effect of specification was that the original owner lost his title in favour of the creator of the new product, but had an action for the value of the materials.

**SPECIFIC PERFORMANCE,** an equitable doctrine under which a court of equity, in certain exceptional cases where the normal legal remedy, *i.e.* damages, would not be a sufficient compensation, orders from a defaulting party a specific or actual performance of the thing which he had contracted to do. The courts act on their own discretion in affording or refusing the relief of specific performance, and as a general rule will refuse that relief where the common law remedy is adequate, where the court would be unable to superintend or enforce the execu- tion of its judgment, where the plaintiff has himself acted inequitably, or where the enforcement of specific performance would be unreasonable. Specific performance is usually con­fined to executory agreements, such as a conveyance or a lease of land; it is not usually enforced in the cases of personal acts or in those of contracts for personal service. In the case of a contract for the sale of a chattel the courts will only order specific performance when the chattel is of peculiar value to the purchaser and cannot be obtained elsewhere. The courts are guided considerably by precedent, and it is only by reference to a standard textbook that details can be obtained of the conditions and restrictions which hedge the jurisdiction of the courts. In Scots law specific performance, or “ implement,” is part of the ordinary jurisdiction of the courts.

See Fry on *Specific Performances Ency. English Law,* tit. “ Specific Performance and Story, *Equity Jurisprudence.*

**SPECTACLES,** the name given to flat glasses, prisms, spherical or cylindrical lenses, mechanically adjusted to the human eyes, so as to correct defects of vision (*q.v.).* They are made usually of crown glass or rock crystal (“pebbles”), the latter being somewhat lighter and cooler to wear. They are mounted in rigid steel wire or gold frames, with fastening-pieces over the ears; single or double eye-glasses, and hand-glasses, or lorgnettes, being varieties of form, according to the circumstances and the wearer’s taste.

*Preserves*.—Preserves are used to conceal deformities or to protect the eyes in the many conditions where they cannot tolerate bright light, such as ulceration and inflammation of the cornea, certain diseases of the iris, ciliary body, choroid, and retina. They are made of bluish, “smoked,” or almost black coloured glass, and are of very various shapes, according to the amount of obscuration necessary.

*Prisms.—*Prisms are of great value in cases of double vision due to a slight tendency to squinting, caused by weakness or over-action of the muscular apparatus of the eyeball. Prisms deflect rays of light towards their bases. Hence, if a prism is placed in front of the eye with its base towards the nose, a ray of light falling upon it will be bent inwards, and seem to come from a point farther out from the axis of vision. Conversely, if the base of the prism is turned towards the temple, the ray of light will seem to come from a point nearer the axis, and will induce the eye to turn inwards, to converge towards its fellow. In cases of myopia or short-sight owing to weakness of the internal recti muscles, the eyes in looking at a near object, instead of converging, tend to turn outwards, and so double vision results. If a suitable prism is placed in front of the eyes the double vision may be prevented. These prisms may be combined with concave lenses, which correct the myopia, or, since a concave lens may be considered as composed of two prisms united at their apices, the same effect may be obtained by making the distance between the centres of the concave lenses greater than that between the centres of the pupils. Again, to obviate the necessity for excessive convergence of the eyes so common in hypermetropia, the centre of the pupil should be placed outside the centre of the corrective convex lenses; these will then act as prisms with their bases inwards. Where, on the other hand, there is no tendency to squinting, care must be taken in selecting spectacles that the distances between the centres of the glasses and the centres of the pupils are quite equal, otherwise squinting, or at any rate great fatigue, of the eyes may be induced.

*Spherical Lenses.—*Biconcave, biconvex and concavo-convex (meniscus) lenses are employed in ophthalmic practice in the treatment of errors of refraction. Until recently these spherical lenses were numbered in terms of their focal length, the inch being used as the unit. Owing principally to differences in the length of the inch in various countries this method had great inconveniences, and now the unit is the refractive power of a lens whose focal length is one metre. This unit is called a “ dioptric ” (usually written “ D”). A lens of twice its strength has a refractive power of 2 D, and a focal-length of half a metre, and so on.

*Concave Lenses* are used in the treatment of myopia or short­sight. In this condition the eye is elongated from before back­wards, so that the retina lies behind the principal focus. All objects, therefore, which lie beyond a certain point (the conjugate focus of the dioptric system of the eye, the far point) are indis- tinctly seen; rays from them have not the necessary divergence to be focused in the retina, but may obtain it by the interposition of suitable concave lenses. Concave lenses should never be used for work within the far point; but they may be used in all cases to improve distant vision, and in very short-sighted persons to remove the far point so as to enable fine work such as sewing or reading to be done at a convenient distance. The weakest pair of concave lenses with which one can read clearly test types at a distance of 18 ft. is the measure of the amount of myopia, and this fully correcting glass may be worn in the slighter forms of short-sight. In higher degrees, where full correction might increase the myopia by inducing a strain of the accommodation, somewhat weaker glasses should be used for near work. Tn the highest degrees the complete correction may be employed, but lorgnettes are generally preferred, as they can be removed when the eyes become fatigued. It must be remembered that