as a standard for illuminants on account of the uniform steady light they afford. The substance is further used in the dressing of fabrics and in medicine and surgery, especially in cerates, bougies, ointments, and in cosmetic preparations. For sperm oil, see Whale Oils.

SPEUSIPPUS, son of Eurymedon and Potone, is sup­posed to have been born about 407 B.c. He was bred in the school of Isocrates; but, when his maternal uncle, Plato, returned to Athens about 387, he yielded to his influence and became a member of the Academy. In 361, when Plato undertook his third and last journey to Sicily, Speusippus accompanied him. In 347 the dying philo­sopher nominated his nephew to succeed him as scholarch, and the choice was ratified by the school. Speusippus held the office for eight years, and died in 339 after a paralytic seizure. According to some authorities he com­mitted suicide. There is a story that his youth was riotous, until Plato’s example led him to reform his ways. In later life he was conspicuously temperate and amiable. He was succeeded by Xenocrates.

Of Speusippus’s many philosophical writings nothing survives except a fragment of a treatise *On Pythagorean Numbers.* Nor have secondary authorities preserved to us any general statement or conspectus of his system. In­cidentally, however, we learn the following details. (A) In regard to his theory of being,—(1) whereas Plato postu­lated as the basis of his system a cause which should be at once Unity, Good, and Mind, Speusippus distinguished Unity, the origin of things, from Good, their end, and both Unity and Good from controlling Mind or Reason ; (2) whereas Plato recognized three kinds of numbers— firstly, ideal numbers, the formal causes of the ideas ; secondly, mathematical numbers, the abstractions of mathematics ; and thirdly, sensible numbers, numbers em­bodied in things—Speusippus rejected the ideal numbers, and consequently the ideas; (3) Speusippus traced number, magnitude, and soul each to a distinct principle of its own.

(B) In regard to his theory of knowledge,—(4) he held that a thing cannot be known apart from the knowledge of all things besides ; for, that we may know what a thing is, we must know how it differs from other things, which other things must therefore be known ; (5) accord­ingly, in the ten books of a work called Ὅ*μοια*, he attempted a classification of plants and animals ; (6) the results thus obtained he distinguished at once from “know­ledge ” (*ἐπιστήμη*) and from “ sensation ” (*αἴσθησις*), hold­ing that “ scientific observation” (*ἐπιστημovικὴ* *αἴσθησις*), though it cannot attain to truth, may nevertheless, in virtue of a certain acquired tact, frame “ definitions ” (λόγοι).

(C) In regard to his theory of ethics,—(7) he denied that pleasure was a good, but seemingly was not prepared to account it an evil.

In default of direct evidence, it remains for us to com­pare these scattered notices of Speusippus’s teaching with what we know of its original, the teaching of Plato, in the hope of obtaining at least a general notion, firstly, of Speusippus’s system, and, secondly, of its relations to the systems of Plato, of contemporary Platonists, such as Aristotle, and of the later Academy.

It has been suggested elsewhere (Socrates, p, 238 *supra)* that the crude and unqualified “ realism ” of Plato’s early manhood gave place in his later years to a theory of natural kinds founded upon a “ thoroughgoing idealism,” and that in this way he was led to recognize and to value the classi- ficatory sciences of zoology and botany. More exactly, it may be said that the Platonism of Plato’s maturity included the following principal doctrines :—(i.) the supreme cause of all existence is the One, the Good, Mind, which evolves itself as the universe under certain eternal immutable forms called “ideas”; (ii.) the ideas are apprehended by

finite minds as particulars in space and time, and are then called “things”; (iii.) consequently the particulars which have in a given idea at once their origin, their being, and their perfection may be regarded, for the purposes of scientific study, as members of a natural kind ; (iv.) the finite mind, though it cannot directly apprehend the idea, may, by the study of the particulars in which the idea is revealed, attain to an approximate notion of it.

Now when Speusippus (1) discriminated the One, the Good, and Mind, (2) denied the ideas, and (3) abandoned the attempt to unify the plurality of things, he explicitly rejected the theory of being expressed in (i.) and (ii.) ; and the rejection of the theory of being, *i.e.,* of the conception of the One evolving itself as a plurality of ideas, entailed consequential modifications in the theory of knowledge conveyed in (iii.) and (iv.). For, if the members of a natural kind had no common idea to unite them, scientific research, having nothing objective in view, could at best afford a *λόγος* or definition of the appropriate particulars ; and, as the discrimination of the One and the Good im­plied the progression of particulars towards perfection, such a *λόγος* or definition could have only a temporary value. Hence, though, like Plato, Speusippus (4) studied the differences of natural products (5) with a view to classification, he did not agree with Plato in his conception of the significance of the results thus obtained ; that is to say, while to Plato the definition derived from the study of the particulars included in a natural kind was an ap­proximate definition of the idea in which the natural kind originated, to Speusippus the definition was a definition of the particulars studied, and, strictly speaking, of nothing else. Thus, while Plato hoped to ascend through classificatory science to the knowledge of eternal and immutable laws of thought and being, Speusippus, abandoning onto­logical speculation, was content to regard classificatory science not as a means but as an end, and (6) to rest in the results of scientific observation. In a word, Speusippus turned from philosophy to science.

It may seem strange that, differing thus widely from his master, Speusippus should have regarded himself and should have been regarded by others as a Platonist, and still more strange that Plato should have chosen him to be his successor. It is to be observed, however, firstly, that the scientific element occupied a larger place in Plato’s later system than is generally supposed,@@1 and, secondly, that the only Academics who came into competition with Speusippus agreed with him in his rejection of the theory of ideas. Hence Plato, finding in the school no capable representative of his ontological theory, might well choose to succeed him a favourite pupil whose scientific enthusiasm and attainment were beyond question ; and Speusippus’s rivals, having themselves abandoned the theory of ideas, would not be in a position to tax him with his philosophi­cal apostasy.

In abandoning the theory of ideas—that is to say, the theory of figures and numbers, the possessions of universal mind, eternally existent out of space and time, which figures and numbers when they pass into space and time as the heritage of finite minds are regarded as things— Speusippus had the approval, as of the Platonists gener­ally, so also of Aristotle. But, whereas the new scholarch, confining himself to the detailed examination of natural kinds, attempted no comprehensive explanation of the uni­verse, Aristotle held that a theory of its origin, its motions,

@@@1 That Plato did not neglect, but rather encouraged, classificatory science is shown, not only by a well-known fragment of the comic poet Epicrates, which describes a party of Academics engaged in investi­gating, under the eye of Plato, the affinities of the common pumpkin, but also by the Timæus, which, while it carefully discriminates science from ontology, plainly recognizes the importance of the study of natural kinds.