Munich, who noticed all its practically important properties and saw their significance. Water glass when in compact pieces looks like ordinary glass, and is not at all obviously attacked by cold water. But when the powdered substance is boiled with water it dissolves, and the solution can be boiled down to the consistence of a syrup without anything separating out even in the cold. Such water-glass syrup, when applied as a coating to wood, pasteboard, &c., dries up into a coherent varnish which renders the object non-inflammable, because in the heat of a fire the coat­ing melts into a continuous viscid covering which prohibits access of oxygen to the interior. The early application of water glass to the scenery of the Munich court theatre explains its long immunity from destructive fires. When mixed with powdered chalk, magnesite, phosphate of lime, and many other similar mate­rials, it gradually unites with these into hard stone-like masses. Caustic lime and magnesia (MgO) thus unite with it with ex­ceptional promptitude, with elimination of alkali. Water glass, in short, is to the class of mineral substances referred to what ordinary glue is to wood and paper, &c., and it is used largely for analogous purposes. Fuchs himself based upon this property of his preparation a new process of wall painting which was sub­sequently developed and brought to great perfection by Kaulbach and others. In this process of “stereochromy,” as it is called, the more immediate basis for the painting consists of a thin layer of a kind of cement made up of powdered marble, dolomite, quartz, and air-worn quicklime with water glass. On it the colours are laid with plain water, which causes them to stick on, but quite loosely, so that the artist can work at leisure and correct mistakes. The finished painting is fixed by applying to it a spray of water glass solution, which, in the course of a few days makes it per­fectly fast. All that then remains to be done is to wash the painting with alcohol to remove the eliminated alkali and any dust that may have collected. A stereochromic painting (unlike one made by the old fresco process) is practically proof against atmospheric influences, even under a northern climate. In a water-glass solution the alkali is, so to say, only half combined with the silica; part of it in fact must be presumed to be present in the free state. At any rate the solution emulsionizes fats, and therefore is a cleansing agent in the same sense as soap-solution is. Water glass and other alkaline silicates are accordingly used as additions to some of the cheaper kinds of soap.

SILISTRIA, or Silistra, a fortified town on the south side of the Danube, 75 miles below Rustchuk, and 150 miles from the mouth of the river, is now at the head of a district in the principality of Bulgaria. In 1881 the population was 10,657.

Silistria is the Durostorum of the Romans, the Durostolos of the Byzantines, the Drstr of the Bulgarians. It was one of the most important towns of the Roman province of Mœsia Inferior, successively the headquarters of the legio I. Italica and the legio XI. Claudia. It was defended by the Bulgarian czar Simeon against the Hungarians (893). Captured by Svyatoslaff, the Varingian called to the assistance of the emperor Nicephorus (967), it was subse­quently recovered by the Bulgarians after a three months’ heroic defence. Under the Turks, whose rule began in the latter part of the 14th century, Silistria continued to flourish: Hajji Khalfa describes it as the most important of all the Danubian towns. It was the seat of a Greek metropolitan with five bishops under him; and a settlement of Ragusan merchants kept alive its com­mercial interests. The Russians, who captured Silistria in 1810, destroyed its fortifications before they withdrew; but they were rebuilt by foreign engineers, and in 1828-9 were strong enough to offer a serious resistance to the Russians, who lost 3000 men. At that date the population, including the garrison, was 24,000, but in 1837 it was only about 4000. In 1854 the town was successfully defended by General Krach against the Russians till the arrival of the Austrians in the peninsula. It was again invested by the Russians in 1877, and on the conclusion of peace was evacuated by the Turks.

SILIUS ITALICUS, a Latin epic poet, was born in 25 and died in 101 a.d. His birthplace is unknown. From his cognomen Italicus the conclusion has been drawn that he came from the town of Italica in Spain; but Latin usage would in that case have demanded the form *Itali­censis,* and it is highly improbable that Martial would have failed to name him among the literary celebrities of Spain in the latter half of the 1st century. The conjecture that Silius was from Italica, the capital of the Italian confedera­tion during the Social War, is open to still stronger objection. Most likely some ancestor of the poet acquired the title “Italicus” from having been a member of one of the corporations of “Italici” who are often mentioned

in inscriptions from Sicily and elsewhere. In early life Silius was a renowned forensic orator, later a safe and cautious politician, without ability or ambition enough to be legitimately obnoxious to the cruel rulers under whom he lived. But mediocrity was hardly an efficient protection against the murderous whims of Nero, and Silius was generally believed to have secured at once his own safety and his promotion to the consulship by putting his oratorical powers to discreditable use in the judicial farces which often ushered in the doom of the emperor’s victims. He was consul in the year of Nero’s death (69), and is mentioned by Tacitus as having been one of two witnesses who were present at the conferences between Vitellius and Flavius Sabinus, the elder brother of Vespasian, when the legions from the East were marching rapidly on the capital. The life of Silius after his con­sulship is well depicted by the younger Pliny:—“He conducted himself wisely and courteously as the friend of the luxurious and cruel Vitellius; he won repute by his proconsulship of Asia, and obliterated by the praiseworthy use he made of his leisure the stain he had incurred through his active exertions in former days. In dignity and content­ment, avoiding power and therefore hostility, he outlived the Flavian dynasty, keeping to a private station after his governorship of Asia.” His poem contains only two passages relating to the Flavians; in both Domitian is eulogized as a warrior; in one he figures as a singer whose lyre is sweeter than that of Orpheus himelf. Silius had evidently little taste for bowing down in the house of Rimmon, and refrained from using the many opportunities which his epic afforded for humouring the vanity of the imperial house. He was a great student and patron of literature and art, and a passionate collector. Two great Romans of the past, Cicero and Virgil, were by him idealized and veritably worshipped; and he was the happy possessor of their estates at Tusculum and Naples. The later life of Silius was passed on the Campanian shore, hard by the tomb of Virgil, at which he offered the homage of a devotee. He closely emulated the lives of his two great heroes: the one he followed in composing epic verse, the other in debating philosophic questions with his friends of like tastes. Among these was Epictetus, who judged him to be the most philosophic spirit among the Romans of his time, and Cornutus, the Stoic, rhetorician, and grammarian, who appropriately dedicated to Silius a commentary upon Virgil. Though the verse of Silius is not wrapped in Stoic gloom like that of Lucan, yet Stoicism lends in many places a not ungraceful gravity to his poem. Silius was one of the numerous Romans of the early empire who had the courage of their opinions, and carried into perfect practice the theory of suicide adopted by their school. Stricken by an incurable disease, he starved himself to death, keeping a cheerful countenance to the end.

Whether Silius committed to writing his philosophic dialogues or not, we cannot say. Chance has preserved to us his epic poem entitled *Punica,* in seventeen books, and comprising some fourteen thousand lines. The epics of Silius, Lucan, Statius, and Valerius Flaccus are but a few waifs carried down to us by the wander­ing stream of time from the vast mass of post-Virgilian epics. Long before Silius bethought himself of his epic all possible historical and mythological themes had been worn to tatters by these poets. In choosing the Second Punic War for his subject, Silius had, we know, many predecessors, as he doubtless had many followers. From the time of Nævius onwards every great military struggle in which the Romans had been engaged had found its poet over and over again. In justice to Silius and Lucan, it should be observed that the mythologic poet had a far easier task than the historic. In a well-known passage Petronius pointedly describes the difficulties of the historic theme. A poet, he said, who should take upon him the vast subject of the civil wars would break down beneath the burden unless he were “full of learning,” since he would have not merely to record facts, which the historians did much better, but must possess an unshackled