jected by Napoleon III., was begun in 1884, under the architectural direction of Nénot. The old church con­taining the tomb of Richelieu is to be retained on account of its artistic merit.

SORGHUM. See Millet.

SORIA, a province of Spain, in Old Castile, bounded on the N. by Logroño, E. by Saragossa, S. by Guadalajara, and W. by Segovia and Burgos ; the area is 3836 square miles. It is a bleak and lofty region, being bounded on three sides by mountains. A range of low sierras on the north, and the great Sierra de Moncayo on the east, separate the valley of the Duero (Douro) from that of the Ebro, while on the south it is divided from that of the Tagus by a continuation of the Sierra Guadarrama. The whole of the province belongs to the region watered by the Duero and its affluents. This river rises in the northern mountains, and traverses the province in a circuitous course, first to the south and then to the west. The other rivers are mostly affluents of the Duero, such as the Tuerto, San Pedro, &c. ; but a few of the tributaries of the Ebro have their sources within the limits of the province. The soil is not remarkable for fertility ; on the contrary, a large proportion of the area is occupied with barren mountains, which are covered with snow for a great part of the year. There are, however, in some places extensive forests of pine, oak, and beech ; while in others there are large tracts of pasture land, on which numbers of cattle, sheep, and swine are reared. Grain and veget­ables are raised, but neither of very good quality nor in sufficient quantities to supply the wants of the population. The climate is cold and dry, and the scenery grand, but not very pleasing in its character. Most of the people are employed in farming and rearing cattle ; but the cutting and sawing of timber and the preparation of charcoal also occupy a considerable number. There is a great want of roads in this part of the country ; and commerce is consequently very limited. Fine wool was formerly an important production of the province ; but of late years it has considerably fallen off. The only important article of trade at present is timber, which is sent to Madrid and Aragon. Soria is divided into five partidos judiciales and 345 ayuntamientos. The population was returned in 1877 as 153,654. There is a bishop (suffragan of Burgos), resi­dent at Osma. The only town of more than 5000 inhab­itants is Soria.

SORIA, the capital of the above province, on a hill on the right bank of the Duero, 113 miles north-east of Madrid, is an ancient town, still surrounded by walls which were built in the 13th century. It contains several squares, in one of which stand the court-house and prisons and in another the spacious palace of the dukes of Go- mara. The churches of Santo Domingo and San Nicolas, the cloisters of the convent of San Juan, and several other ecclesiastical buildings are fine specimens of Romanesque work of the 12th and 13th centuries. The population is chiefly agricultural ; but there are also flour-mills, tanneries, potteries, &c. ; and some trade in timber, wool, and fruit is carried on. Three and a half miles distant is the site of the ancient Numantia. But few traces of the old city, however, remain. A railway has long been pro­jected between Soria and Calatayud, upon the Madrid and Saragossa line. The population in 1877 was 6286.

SORREL. See Horticulture, vol. xii. p. 288.

SORRENTO, a city of Italy, in the province of Naples, on the north side of the peninsula that separates the Bay of Naples from the Bay of Salerno, about 11/2 miles to the east of Capo di Sorrento, crowned by the ruins of a temple of Neptune. Sorrento contains only a few unimportant remains of the magnificent buildings which made it in the time of Augustus a finer city than Naples ; and its present

prosperity depends mainly on the reputation it enjoys as a summer watering-place, with a delightful and healthy climate, and situated amid picturesque coast scenery. The chief local industry is the inlaying of wood. In ancient times the Surrentine wines had a great repute. The population was 4254 in 1861 and 6089 ir 1881.

Surrentum was of very ancient origin, but it does not appear frequently in history. A famous temple of Minerva stood on the Promontorium Surrentinum (now Punta della Campanella). In 1558 the corsair Pialy attacked the town and carried off 2000 prisoners. Statius celebrated the delights of the Surrentine villa owned by his friend Pollius Felix ; it was at Sorrento that Bernardo Tasso wrote his *Amadigi* ; and Torquato Tasso was born in the town in 1544.

SOSIGENES, the astronomer who was employed by Julius Cæsar to reform the Roman calendar, 46 b.c. (see Calendar). Of his life nothing further is known, with the exception of two references to him by Pliny, which show that he left some astronomical treatises. The chief one is as follows :—

“Tres autem fuere sectæ, Chaldæa, Ægyptia, Græca. His addidit quartani apud nos Cæsar dictator annos ad solis cursum redigens singulos, Sosigene perito scientiæ ejus adhibito ; et ea ipsa ratio postea comperto errore correcta est, ita ut XII. annis con­tinuis non intercalaretur, quia coeperat sidera annus morari qui prius antecedebat. Et Sosigenes ipse trinis commentationibus, quamquam diligentior ceteris, non cessavit tamen addubitare ipse semet corrigendo.”—*H. N.,* xviii. 25.

From another passage (*H*. *N*., ii. 8) we infer that Sosigenes maintained that Mercury moved in an epicycle about the sun ; this doctrine is referred to by his contem­porary Cicero, and it was also that of the Egyptians (see Ptolemy). Sosigenes is commonly called an Egyptian and a Peripatetic, but this has arisen from his having been confounded with a Peripatetic philosopher of the same name who lived in the 2d century of the Christian era, and who will be briefly noticed below. It is most probable, however, that he was a Greek of Alexandria, for the follow­ing reasons. (1) Cæsar had just returned victorious from his Alexandrian expedition, which occupied parts of the years 48 and 47 b.c., when, with the assistance of Sosi­genes, he settled the chronological question. (2) We learn from Plutarch *(Cæs.,* 59) that “Cæsar laid the problem (viz., the correction of the calendar) before the ablest philosophers and mathematicians,” and at. that time the school of Alexandria was world-famous. (3) We know that Cæsar was himself a diligent student of astronomy. Lucan, in a passage which refers to his correction of the calendar, represents him as saying that even in the midst of his campaigns he had always found time for astrono­mical pursuits :—

“ media inter prælia semper Stellarum cælique plagis superisque vacavi ;

Nec meus Eudoxi vincetur Fastibus annus.”—x. 185-7.

(4) Macrobius says that Cæsar wrote a work on the motion of the stars, and expressly states, moreover, that he derived from the Egyptian schools his information on this sub­ject, and also what he required for the correction of the calendar.@@1 (5) Cæsar’s arrangement was substantially the same as the reform of the Egyptian calendar in the year 238 b.c. under Ptolemy III. Euergetes, a fact which remained unknown until the discovery of the Decree of Canopus by Lepsius at Sanor Tanis in Egypt in the year 1866.

Zeller (*Phil. cl. Gr.,* vol. iii. part 1, 2d ed., p. 705-6, note of p. 703, and p. 694, note 3), and after him, but in a more complete manner, Th. H. Martin *(Annales* de la Faculté des Lettres de Bordeaux, 2e fasc., 1879), have shown, in opposition to the prevail­ing opinion, which had been formerly held by Zeller himself, that

@@@1 “Nec mirum si hæc digeries morsum reprehensionis evasit, cui arcessita est ab Ægypto postremæ correctionis auctoritas. Nam Julius Cæsar, ut siderum motus, de quibus non indoctos libros reliquit, ab Ægyptiis disciplinis hausit, ita hoc quoque ex eadem institutione mutuatus est, ut ad solis cursum finiendi anni tempus extenderet.”— Sat., i. 16.