regulus oſ antimony, mercury, arſenic, and cobalt ; gold and zinc are marked in this table as being incapable of uniting with ſulphur.

The compounds formed by ſulphur with different metals are different ; but all of them poſſeſs a metallic lustre, with­out any ductility : theſe combinations of sulphur and of me­tals are very frequently found in a natural ſtate. Almoſt all the metals which we dig from the earth are naturally found combined with ſulphur, forming moſt of the ores and metallic minerals.

It is a curious phenomenon, that nitre mixed with ſulphur burns rapidly, even in cloſe vessels ; this is eaſily explained by the new ſyſtem. Nitre, when heat is applied to it, yields a great quantity of vital air ; and ſulphur is a combuſtible body, or, which is the ſame thing, has a ſtrong attraction for vital air. As vital air is thus ſupplied, which is the on­ly principle neceſſary to combuſtion, communication with the atmoſpheric air is unneceſſary. The ſulphur will burn till the whole vital air which the nitre furniſhes be conſumed. The products obtained by this proceſs are different according to the proportions of nitre and ſulphur which are employed. If eight parts of ſulphur and one of nitre be ſet on fire in a cloſe veſſel, ſulphuric acid is produced ; and this is the method by which oil of vitriol or ſtrong ſulphuric acid was formerly made in Great Britain. The vessels in which the operation was performed were large glaſs bal­loons, with very large necks, each containing 400 or 500 pints. But it was attended with great expence, on account of the high price and brittleneſs of the balloons. A few years ago a cheaper method has been attempted with ſucceſs in France. The ſulphur is burned on a kind of grid­irons, in large apartments lined with lead. As the acid condenſes it is conveyed by gutters into a reſervoir, and after­wards concentrated. It muſt be obſerved, that the ſulphu­ric acid thus obtained is always combined with a little sulphur and ſulphat of pot-aſh, a ſmall quantity of aluminous ſulphat and ſulphat of lead; but theſe ſubſtances are in ſo ſmall a proportion, that for common uſe it is not neceſſary to separate them. If neceſſary, however, it may eaſily be done by diſtilling the acid to dryneſs.

Gunpowder, the terrible effects of which are owing to its ſtrong tendency to combuſtion, is a mixture oſ ſulphur, nitre, and charcoal. (See Gunpowder). But there is another mixture of which ſulphur is an ingredient ſtill more violent in its effects : This is called fulminating *powder,* and is compoſed of three parts of nitre, two parts of the carbo­nate of pot-aſh, and one of powdered ſulphur. Theſe being cloſely united together by trituration in a hot marble mortar, when expoſed to a flight degree of heat, will melt, and produce a violent detonation like the report of a cannon. A dram oſ this mixture is ſufficient for the experiment.

Sulphur is of great uſe in chemiſtry, in medicine, and the arts. Sulphur is uſeful in making ſome fuſions, preci­pitations, and ſeparations of metals and minerals ; but is particularly uſeful, as being the ſubſtance from which the ſulphuric acid is obtained. Hepar ſulphuris is employed in chemiſtry for making ſeveral ſolutions.

Sulphur is employed in medicine both internally and ex­ternally. It is given either in flowers or in lozenges, made up with ſugar, or joined to magneſia, cryſtals of tartar, manna, caffia, lenitive electuary, &c. Two or three drams generally prove laxative ; and it is given in ſuch doſes in cafes ot piles of uterine, and other hoemorrhagies ; becauſe it does not ſtimulate nor heat during its operation, nor leave a dispoſition to coſtiveneſs, as rhubarb, aloes, and other hot reſinous purges do. Sulphur was formerly much recom­mended in coughs and diſeaſes of the breaſt, but of late its virtues as a pectoral have been much doubted. When ap­plied externally, it is mixed with ſome unctuous ſubſtance, as hogs lard, butter, &c. and is rubbed on ſuch parts oſ the body as are affected with eruptions.

Some phyſicians and chemiſts, conſidering that ſulphur is infallible in water, and capable of reſiſting the action of moſt menſtruums, have affirmed, that it can produce no effect when taken internally, single and unaltered ; but this aſſertion ſeems to be without foundation ; for it is certain, that the sweat and perlpiration of thoſe who take ſulphur internally have a ſmell evidently ſulphureous. Belides, sulphur is much more fallible than is generally believed. It is attacked by all oily and ſaponaceous ſubſtances, and conſequently by almoſt all animal liquors.

We cannot eaſily form a very diſtinct and clear idea of the manner in which ſulphur acts internally upon our bo­dies ; but, from obſervations made upon its effects, it ap­pears to be dividing, ſtimulating, and ſomewhat heating : it principally acts upon the perſpirable parts of the body, the chief of which are the ſkin and lungs ; and from this property it is particularly uſeful in ſome diſeaſes of theſe parts.

Sulphur is alſo a powerful repellent, as appears from its curing ſeveral kinds of itch, merely by external application, in form of ointments and pomatums. Several mineral wa­ters, which are drunk or uſed as baths for ſome diſeaſes, owe their good qualities to ſulphur contained in them.

Sulphur is allo uſed in several arts. By means of it fine impreſſions of engraved ſtones are taken. Matches are formed of it ; and its utility as an ingredient in the prepa­ration of gunpowder and fireworks is well known. Laſtly, it is uſed for whitening wool, ſilk, and many other matters expoſed to its vapour during its combuſtion ; the colours and redneſs of which could not be deſtroyed by any other ſub­ſtance, but are quickly effaced by this acid vapour.

*SULPHUR-Wort,* in botany. See Peucedanum.

SULPHURIC-acid, the name adopted by the French chemiſts for the vitriolic acid. It is formed by a combina­tion of ſulphur with vital air, as deſcribed under the article Sulphur. When ſulphur is burned with a low degree of heat, it burns with a blue flame, and diffuſes a ſuffocating vapour, which, when collected, is called *ſulphureous acid.* When ſulphur is expoſed to ſtrong heat it burns rapidly, and emits a lively white flame, and has no ſmell ;. the reſidue is called *ſulphuric acid.* The ſulphureous is a weaker acid than the ſulphuric, owing to its containing a leſs quan­tity of oxygene.

SULPICIA, an ancient Roman poeteſs, who lived un­der the reign of Domitian, and has been ſo much admired as to be termed the *Roman Sappho.* We have nothing, however, left of her writings but a ſatire, or rather the fragment of one, againſt Domitian, who publiſhed a decree for the baniſhment of philoſophers from Rome : which ſa­tire is to be found in Scaliger’s A*ppendix Virgiliana.* She is mentioned by Martial and Sidonius Apollinaris ; and is ſaid to have addreſſed a poem on conjugal love to her huſband Calenus, a Roman knight.

SULPICIUS (Severus), an eccleſiaſtical writer who flouriſhed about the beginning of the 5th century, and was contemporary with Rufinus and St Jerome. He was the diſciple of St Martin of fours, whoſe life he has written ; and the friend of Paulinus biſhop of Nola, with whom he held an intimate correſpondence. The principal of his works is his Histo*ria Sacra,* from the creation of the world to the conſulate of Stilicho and Aurelian, about the year 400 ; in which his ſtyle is elegant beyond the age he lived in.

SULTAN, or Soldan, a title or appellation given to the emperor of the Turks.

Vattier will have the word Turkiſh, and to ſignify *king*