of small-pox, *if exposed to its influence,* (which they are not, as it has been clearly proved by experiment that indi­viduals may be successfully revaccinated, and yet be un­susceptible of the poison of small-pox,) what would be the result ? Their chances of recovery would be as 100 to one, that of dying as one to 100. Or, in other words, if 100 were attacked with small-pox after vaccination, only one would die ; whereas, if 100 who had formerly had small­pox were again attacked, no fewer than twenty would die. Now this is stating the facts in their most favourable light for the opponents of vaccination, as, according to what has occurred in several of the variolous epidemics, only one of the vaccinated has died out of 330 individuals attacked ; but either of the statements is quite sufficient to prove the im­mense superiority of vaccination to inoculation, and also the fact, that the security afforded does not decrease with the advance of life.

The Royal Academy of Medicine of France, after the fullest inquiry into this subject, have arrived at the conclu­sion, that vaccination gives, in general, perfect protection from a subsequent attack of small-pox,—a protection fully as perfect as if the individual had gone through the small­pox itself; and when the government applied to them in 1839, to ask their advice as to whether the students at the different public schools and colleges ought to be revacci­nated before leaving them, they returned for answer that they ought not, as having been once vaccinated gave pro­tection from small-pox for the remainder of life.

It is extremely satisfactory to learn that all extend­ed inquiries have led to the same result, that vaccination gives full protection from small-pox for life. Too little attention has, in this country, been paid to the statistics of disease, and also to vaccination, to give anything like accu­rate results as to the effects of vaccination in diminishing the mortality from small-pox ; but in several countries of the continent of Europe, the same remissness has not been shown, and there the advantages of the general introduction of vaccination is demonstrated. One instance may suffice for illustration. In Sweden, in the year 1779, no fewer than 15,000 persons were cut off by small-pox ; and in 1800, the year before the introduction of vaccination, 12,000 fell victims to the same disease. Great exertions were now made to introduce and carry into effect the beneficial prac­tice of vaccination, when the mortality from small-pox yearly diminished, till it fell so low as eleven in the year 1822, and thirty-seven in the year 1823. Since then, “ for a period of eight years, not a single case of small-pox has occurred in the dominions of his Swedish majesty: the whole inhabi­tants had been vaccinated.”

If the anti-variolous powers of vaccination failed after a certain number of years, say ten or fifteen, instead of having, as above stated, an annually decreasing number of small­pox cases, we should have seen them occurring in a gradually increasing ratio. But as the practice has now stood the test of a whole generation, and has been found to be as effectually protective at the end of that long period as at the beginning, we may safely acquiesce in the conclusion of the French Academy of Medicine. The truth is, that the ratio of mortality from small-pox, after vaccination, is greatly less than that of almost any disease to which the human frame is subject ; and were vaccination as generally practised, and as carefully attended to, in this and other countries, as in Sweden, the sanguine hope of Jenner might yet be fulfilled, that the small-pox might be quite extinguished, (c. m.)

VACS, a city of the Austrian kingdom of Hungary, in the province of the Upper Danube, the capital of a circle of the same name, but called by the Germans Waizen. It stands on the river Danube, on a fruitful plain. It is the seat of a biahop, has a cathedral and several other churches, two monasteries, a college, an orphan house, and a military academy. It contains 800 houses, with 5430 inhabitants, who trade largely in corn, cattle, and wine. Lat. 47. 47. Long. 19. 2. 35. E.

VACUUM, in *Philosophy,* denotes a space void of all matter or body. It has been disputed whether there be in nature a perfect vacuum ; but if bodies consist of material solid atoms. It is evident that there must be vacuities, or motion would be impossible. We can even produce some­thing very near a vacuum in the receiver of an air-pump, and in the Toricellian tube.

VAGABOND, or Vagrant, one who wanders illegally, without a settled habitation. Such persons are cognizable by the laws.

VAILLANT, Jean Foy, to whom, according to Vol­taire, France was indebted for the science of medals, and Louis XIV. for one half of his cabinet, was born at Beau­vais on the 24th of May 1632. At the age of three, he lost his father, and the charge of his education was under­taken by one of his maternal unclcs. This uncle, who be­longed to the magistracy, and who had destined him for his successor, died after bequeathing him his name and a part of his fortune ; and being thus left to follow his own incli­nation, he relinquished the study of law for that of physic, and took a doctor’s degree. He engaged in practice at Beauvais, but was accidentally drawn into a new depart­ment of study, which he prosecuted with great ardour du­ring the remainder of his life. A farmer of that vicinity had found a great quantity of ancient coins, and Vaillant at first inspected them in a cursory manner ; but perceiving that they bore a reference to events either forgotten or in­accurately detailed by historians, he was induced to resume their examination with deep attention, and he succeeded in explaining them with a facility which is generally the result of long experience. Having afterwards made a visit to Paris, he became known to Seguin, eminent for his nu­mismatic skill, and astonished him by the extent of his knowledge. He was introduced to other men of learning ; and the minister Colbert proposed to employ him in travel­ling to collect medals for the royal cabinet. He accepted of the offer, and after travelling into Italy, Greece, Egypt, and Persia, he returned with so many medals as made the king’s cabinet superior to any in Europe. In one of his voyages, in 1674, the ship was taken by an Algerine cor­sair. After a captivity of nearly five months, he w as per­mitted to return to France, and received at the same time twenty gold medals which had been taken from him. He embarked in a vessel bound for Marseille, and was carried with a favourable wind for two days, when another corsair appeared, which, in spite of all the sail they could make, bore down upon them within the reach of cannon shot. Vaillant, dreading the miseries of a fresh slavery, resolved at all events to secure the medals which he had recovered at Algiers, and therefore swallowed them. But a sudden change of the wind freed them from this adversary, and cast them upon the coast of Catalonia ; and after expecting to run aground every moment, they at length fell among the sands at the mouth of the Rhone. He reached the shore in a skiff, but felt himself extremely incommoded with the me­dals he had swallowed, which might weigh altogether five or six ounces, and therefore did not pass like Scarborough waters. He had recourse to a couple of physicians, who were a little puzzled with the singularity of his case ; how­ever, nature relieved him from time to time, and he found himself in possession of the greatest part of his treasure when he arrived at Lyon. Among his collection was an Otho, valuable for its rarity. He was much caressed on his re­turn ; and when Louis XIV. gave a new form to the Aca­demy of Inscriptions in 1701, Vaillant was first made asso­ciate, and then pensionary. In the course of his researches, he had twelve times visited Italy, and twice England and Holland. He was successively married to two sisters; hav­ing obtained a dispensation from the pope, upon condition