

the family, the ethics of the professions, the ethics of politics, the ethics of friendship, the ethics of religious association. The scheme of duties will be treated with special reference to the moral instruction of children.

The provisional programme for the special courses in this department is as follows: "Introduction to an Ethical Theory," three lectures by W. M. Salter; "The Treatment of the Criminal by the State," three lectures by Dr. Charlton T. Lewis; "Ethics and Jurisprudence;" "The Ethical Ideal of the State;" "History of Temperance Legislation." The names of special lecturers not given will be announced later.

The tuition for the entire school, including all the lectures in the three departments, will be ten dollars. Notice of the place determined upon will be published at an early date. For fuller information in reference either to the instruction or to arrangements for boarding, and the like, application should be made to Professor H. C. Adams, dean of Summer School of Applied Ethics, 1602 Chestnut Street, Philadelphia, Penn.

HEALTH MATTERS.

Vaccination in France.

THE *London Medical Recorder*, Feb. 20, 1891, says, "The French Academy of Medicine is just now the scene of a struggle between those who are in favor of a law making vaccination compulsory, and the others who think that the present permissive system goes as far as is consistent with personal liberty. The general in command of the 'volunteers,' that is to say, of those who object to compulsory protection, is no less an authority than Professor Léon Le Fort, and last week he made a vigorous rally from behind his intrenchments, and, with heavy artillery in the shape of arguments, he prevented the further advance of the attacking forces. There are several points in Professor Le Fort's address which merit attention, especially as the matter is at present under consideration in this country. First of all,—and the news will come as a surprise to those who have been in the habit of regarding France as being at the prow of civilization,—all statistics based on the mortality returns from the different diseases must be incomplete, and therefore misleading, for the cause of death is only recorded for statistical purposes in the more important French towns, and presumably not at all in the rural and smaller urban districts. What the total annual mortality from small-pox in France may be, can therefore only be matter of conjecture. Still, the professor admits that it is certainly higher than it ought to be or need be. Another fact, hardly to the credit of French provincial authorities, is, that nowhere outside Paris is any attempt made to isolate the sufferers from small-pox. He is therefore compelled to fall back upon the Paris returns; and these show that the mortality has been steadily diminishing, from 32 per 100,000 inhabitants, during the period 1865-76, 55 per 100,000 in 1880-87, to 5 per 100,000 in 1889. The returns of the Small-pox Hospital at Aubervilliers testify to the same diminution, the admissions and deaths having been as follows:—

	Admissions.	Deaths.
1887.....	1,400	215
1888.....	1,079	152
1889.....	706	63
1890.....	363	37

"There are no available means of ascertaining the proportion of cases of small-pox per 100,000 inhabitants in the country, still less the proportion of deaths to cases of infection. We are, however, told that country doctors have the greatest difficulty in procuring lymph, and the people have the greatest difficulty in getting vaccinated, even supposing they were so disposed.

"Let us compare these figures with the German statistics. It must be borne in mind that vaccination has been compulsory

throughout Germany since 1835, and in some parts since 1815. The returns are as follows:—

	Deaths per 100,000 Inhabitants.
1834.....	54
1836.....	19
1847.....	9
1856.....	7

"In 1865 the war led to a relaxation of the stringent rules in respect of isolation, and forthwith the number of deaths from small-pox jumped up to 46 per 100,000, and in the following year to 62. During the Franco-German war, small-pox was imported into Germany by the returning soldiers, and more particularly by the French prisoners of war; and the mortality from variola in 1871 attained 59,839, and 77,000 in 1872, equal to 233 per 100,000 civilians, and 31 per 100,000 of the military population. In 1874 the vaccination law was consolidated, and a vaccination service founded for the supply of lymph, and by 1877 the number of deaths (810 in 1876) had fallen to 88. This level, however, was not maintained, for in 1882 the figures had again risen to 1,007. Thereupon the German Government enjoined more stringent measures for isolation, and then the downward tendency returned, and in 1886 the number of deaths was 140 only.

"In England in 1885—a time when vaccination had long been in full swing, but when isolation was not seriously enforced—the number of deaths from small pox in London alone was 1,419. In 1886 the number fell abruptly to 24; in 1888, to 9; and in 1889, to 1. This diminution coincided with the introduction of isolation on a large scale, which reached its apogee with the law for compulsory notification in 1889.

"Professor Le Fort argues from these figures, that, though vaccination has an undoubted and valuable influence in affording protection and in mitigating the severity of the disease, the most effective and reliable means of preventing the spread of the disease is rigorously enforced isolation.

"While it is impossible to deny the salutary influence of isolation, it seems a trifle inconsistent to object to vaccination as an infringement of the liberty of the subject, while rallying to the principle of compulsory isolation, which is as directly in contravention of personal liberty as any measure well could be. To take a patient, *non volens*, and shut him up for eight long weeks in a hospital, is surely as obvious an attack on his liberty as to insist on his submitting to the trivial operation of vaccination. This question of personal liberty, unfortunately, does not admit of any categorical reply. Different people have different ideas as to what constitutes liberty, and as to what limits, if any, are to be assigned to its play. Still, the great object that we have in view, is to secure cheerful submission to an infliction imposed by reason rather than by law; and if this could be attained by persuasion, instead of coercive legislation, then the choice would be easy."

NOTES AND NEWS.

THE Legislature of Arkansas has continued the geological survey of that State, and Dr. J. C. Branner has been re-appointed State geologist by the governor. It is expected that the work will be completed during the next two years. A report on manganese will be published by this survey in about a month.

—Miss Emma Garrett has resigned her position of principal of the Pennsylvania Oral School for the Deaf, to take effect June 20, in order to devote her time to establishing a home for the training in speech of deaf children before they are of school age. Miss Garrett will continue her Normal Training School for Teachers of the Deaf, established in 1881. She will have a summer school this year to accommodate some teachers desiring training at that time. For further particulars address her at Scranton, Penn.

—Bulletin No. 12 of the Hatch Experiment Station of the Massachusetts Agricultural College is a report on insects, by C. H. Fernald of the Division of Entomology. The history of the insects, and the methods of destroying or holding them in check, have been worked out at the station or compiled from the most reliable sources. This last has been done because there have been