

capable of destroying the Phylloxera: 1st, the sulpho-carbonate of potassa, and 2d, coal-tar. Neither of these would injure the grape-plant. Experiments made on a large scale at Cognac and Montpellier, France, by delegates of the academy, were highly efficient. Both ingredients are cheap, for the price of a kilogram of each does not exceed one franc. The sulpho-carbonate of potassa is dissolved in water up to 37° Baumé, and 80 cubic centimeter ( $\frac{1}{16}$  liter) poured upon every diseased grape-root. The best time is in November and March, the ground at that time being moist and the insect sure to be in winter quarters. The expense per vine amounts to about 10 centimes. Applying coal-tar, each root receives about 2 kilograms of this liquid, when it will penetrate the ground about 2 feet deep. In both cases the grape-louse is effectually killed.

I am, sir, &c.,

H. ERNI, United States Consul.

We also give extracts from the report of the international congress of vineyardists, at Montpellier, France, October 28, 1874, on the same subject, from the *Journal d'Agriculture Pratique*, No. 46:

The floor was taken by Mr. H. Marès, permanent secretary of the agricultural society of Herault, and president of the ministerial commission. He commenced by recalling to mind the experiments of 1872 and 1873, with the Phylloxera, which were unsatisfactory on account of the invasion of the "pyrale." In 1872 a new experimental field was selected, near Montpellier, belonging to M. Michel Termand. The experiments commenced the 6th July, and comprise fifty-one methods, applied to squares of 25 vines each, the squares being separated by two rows of untreated vines, left to serve as means of comparison, and to prevent confusion in the effects of various modes of treatment. One hundred and forty methods have since been tried in the same vineyard, of which thirty-three were beneficial and nine injurious; the others appeared to have no effect. The most beneficial were as follows, the soil being chalky and ferruginous: Potassium sulphate dissolved in urine; a mixture of the sulphurized manure of Berre, colza cake, and ferric sulphate; potassium sulphate dissolved in water; potash soap dissolved in water; soot; a mixture of farm-dung, wood-ashes, and ammonium hydrochlorate; cow-urine alone or with the addition of gas-tar. All the methods which have proved advantageous are also manurial, especially the salts of potash and ammonia. The injurious methods are those insecticides not manures, as carbonic sulphide, turpentine, petroleum, gas-tar, and phenic