

with the Academy of Agriculture in Stockholm, have devoted much pains to what may be called the arterial drainage of their several districts; and though the more refined method of improvement, known in Great Britain by the name of *thorough drainage*, has not as yet been any where introduced, it is only just to the energy of Sweden to say that no European people, in proportion to its natural resources, has done more during the last twenty years in the reclamation of improveable land from the dominion of overflowing water.

Further advances also are secured by the translation, especially from the English, of the best works on scientific agriculture, under the auspices of the Academy of Agriculture, and by the establishment of agricultural schools and model farms, one of which each province is expected in a few years to possess. Thus in Sweden, as in all other countries, the period of improvement by mechanical means will be succeeded by one of improvement by chemical means—the nature and economical application of which latter means, books and schools will have taught, when the time for more generally applying them shall have come.

RUSSIA.—In Russia, agriculture as a whole is in a very imperfect condition. Here and there, especially in the neighborhood of large towns like Moscow and St. Petersburg, laboriously and skillfully cultivated fields may be seen, while herds of improved Swiss and short horned cattle are carefully reared on the domains of the rich nobility. The Emperor also, who knows well the importance of this art to the strength and prosperity of his dominions, sets an example to his subjects by the efforts he makes to introduce a better system of culture among the serfs on the Imperial estates, by the establishment of schools for the instruction of farmers in art and experimental science, and by the maintenance of model farms upon the appanages of the crown. But Russia, nevertheless, is half a wilderness. Millions of acres of perpetual forest cover rich soils which there are no hands to till. The value of an estate is measured not by the number of acres it contains, but by the number of souls which live upon, cultivate, and are sold along with it. As in the first clearing of a North American wilderness, where land is comparatively worthless, the soil is cropped till it is exhausted, and then new land is subjected to the plough and exhausted in its turn. In no country of the world, with the exception of Northern America, is there so vast a field for the useful emigration of agricultural settlers, as in the mighty Empire of Russia. But language, and religion and political institutions, oppose barriers which the Saxon, and I may say the Teutonic races generally, feel themselves unable to overcome.*

GERMANY.—In order to obtain a correct opinion of the agriculture of a country, a man must not only view the country with his own eyes, but his eyes must be taught both what to look for, and how to look for it. The reports of travellers who are unskilful in rural matters—the educational institutions of the country itself—and even its agricultural statistics, are all unsafe guides where a really correct appreciation is desired of its true position in reference to this important branch of social economy. This observation is illustrated by the actual condition of the several branches of rural economy when compared with the state of agricultural instruction, and with the attention which has been paid to statistics in the different Kingdoms of Germany, and in France.

SAXONY.—In Saxony, a country greatly favored by nature in the character of its soils, the chief attention of the great landholders and of the government, has been long directed to the improvement of the breed of sheep, from which the celebrated Saxon wool is obtained. This Kingdom exhibits generally a very different appearance

from the neighboring country of Bavaria. In passing from the latter kingdom to the former, you "seem to pass," says Mr. Royer, "from the desert into the land of promise." "Two-thirds of the rich proprietors in Saxony," he observes, "cultivate their own properties, and have established an order, neatness, and method, which, though far from agricultural perfection, you seek for in vain in France."

WURTEMBERG.—In the Kingdom of Wurtemberg, where the instruction at the agricultural school of Hohenheim and elsewhere, is better organized, and at this moment more famed, than in any other part of Germany, and where, in fact, the art of culture as a whole is the furthest advanced, the general cultivation is described by Mr. Royer as being melancholy, and, at a distance from the capital, very different from what the eulogies of authors had led him to suppose.

BAVARIA.—In Bavaria we find an imposing array of institutions and means of instruction, specially provided for the rural community, which are fitted to impress the superficial observer with a high idea of its agricultural condition. As in Wurtemberg, there is a central school of agriculture. There are also Chairs of Rural Economy in the Universities, and more than twenty Chairs of Agriculture in the Seminaries and polytechnic schools of the provinces, besides a general Agricultural Society, counting more than 8,000 members. These facts convey the impression of much zeal on the part of the government; much interest in agriculture on the part of the people; and an advanced state of the art of culture in the kingdom generally. But "the miserable aspect of Bavarian Agriculture would lead one to suppose that all these means of encouragement are very inefficacious." [Royer]

The schools are badly organized or conducted. The great land-owners are indifferent on the subject of agricultural improvement, while the miserably defective condition of the roads and other means of internal communication indicate, that even the government which has organized all the formal apparatus we have mentioned, is not itself alive to the most fundamental element of agricultural progress.

PRUSSIA. cannot boast either of its practical agriculture, or of its system of agricultural instruction. It is a proof of how very little has in past ages been done in the way of teaching the rural population the principles of the art of culture, that Prussia should so long have derived an undeserved celebrity from the existence of a private agricultural school at Mogelin, established in 1806, and conducted till his death in 1819, by the distinguished Von Thaer. After his death the school he had founded was made a Royal Academy, and is still in existence. It contains at present only twenty pupils; and even in Von Thaer's time it never contained more than thirty-four. In the much praised primary schools of Prussia, a little instruction in gardening is the only teaching which bears an immediate relation to the future occupations of the rural population.

In the nature of its soils, indeed, which are sandy, light enough to be blown by the winds, and apparently almost sterile, Prussia has much to contend with. This is especially the case in its more ancient and central Dutchies, Westphalia and the Rhenish provinces are naturally richer, and are also more advanced and better cultivated.

Besides, until the revolution of the past year, the burdens or servitudes upon land, of a feudal kind—and of which in the New World you have no examples, except a few of a milder form in the seigniories of Lower Canada—were so onerous and so unequally distributed, as greatly to retard the development of its agricultural capabilities. The state of the roads and other means of communication also, as in Bavaria, and the scarcity of large towns, have concurred with other causes, in retaining the agriculture of Prussia in a very backward condition.

* For information on the state of agriculture in Russia, see also a paper by the Hon. Mr. Stocum, in the transactions of the N. Y. State Agricultural Society, for 1848, p. 638.