

&c. The minister of war fixes the quota to be furnished by each region in such manner as to avoid embarrassment in passing from a state of peace to one of war. The owner of a conscripted animal has the privilege of exemption, provided he can secure a substitute of the same category satisfactory to the commission of *remount*. Horses drawn are classified according to the requirements of different branches of the service, and the prices of each class are fixed by law. Proprietors who refuse or neglect to comply with the requisitions of the law are subject to a variety of penalties for each offense, ranging from 50 francs to 1,000 francs. It is the duty of the owner to deliver conscripted animals to the designated authorities.

### FALSE AGRICULTURAL PHILOSOPHY.

The partial failure of the wheat-crop for three seasons in England has caused some English farmers to suppose that the land has become "sick" of small-grain culture, and that it needs the rest of a long fallow to recuperate. The Mark Lane Express thinks that the failures of the past three years are largely due to improvident culture, and especially to the lack of fertilization. The fine yield of 1874 is cited as sufficiently explosive of the old idea of "sickness of the land," an agricultural superstition dating back to the commencement of the Christian era. Columella, a Roman writer of the first century, wrote against the croakers of that day, who tormented themselves and the public with this absurd chimerica. He charged the failure of crops upon the slothfulness and ignorance of cultivators. It is astonishing how old errors constantly reproduce themselves. In spite of the advance of science and the diffusion of intelligence, men who have opportunities of knowing better surrender themselves to childish delusions, and gravely propound the most fanciful hypotheses to account for facts they do not understand. In the present case, however, the truth lies near the surface. Common sense shows sufficient cause for the late crop-failures in the incompetence or listlessness of farmers themselves. These sharp criticisms find a legitimate application on this side of the Atlantic.

**THE GRAIN-TRADE OF EUROPE.**—The railway-system is producing wonderful changes in the production and distribution of crops in the Old World. Königsberg, in Germany, is rapidly becoming a great point for the shipment of Russian and Polish grain and hemp to Western Europe. The extension of the railways is annually adding to the export-trade of that city in spite of the tariff imposed by

the Russian government. The grain and hemp brought to this market come most mostly from the neighborhood of Orel. A new article of commerce, buckwheat-groats, has lately appeared in the trade, and is largely exported to Holland and Belgium. Russia is completing its lines of transportation from the interior of its own Baltic ports; but Königsberg is but little affected by this competition, as is shown by her annually increasing trade.

**COTTON LANDS IN CALIFORNIA.**—It is estimated by intelligent parties on the Pacific coast that California embraces over 20,000,000 acres of land suited to cotton-culture, or double the area actually employed in the cotton States of the Atlantic slope and the Mississippi Valley. This land, under proper treatment, may be made to produce from ten to eleven millions of bales of cotton per annum, representing a cash-value of about three-quarters of a billion of dollars. But a small portion of the California cotton-lands have been brought under cultivation.

**ARTIFICIAL FERTILIZATION OF FLOWERS.**—It has been discovered that infertile flowers may be fertilized by touching their pistils with camel's-hair pencils dipped in honey; or, still better, in honey mixed with pollen of a fertile flower. In the botanical gardens of Vienna, a *Hibiscus Mexicanus* under this treatment yielded a large quantity of good seeds. Several fruit-trees yielded fruit from blossoms to which this application had been made, while others, not subjected to this process, entirely failed. It is supposed that the honey merely retains the pollen-grains that fall upon it from the stamens, and secures their communication with the germinal organs.

**THE HOP-CROP IN EUROPE.**—From the Mark Lane Express of September 14, the following concerning the hop-crop is taken:

The crop of 1874 cannot be so large as merchants and factors would wish the world to believe. Under no circumstances can the amount exceed 272,000 cwt., or 400 per acre, on the excessive acreage of 68,000 acres, equal to an old duty of £136,000. It is simply absurd to think of any higher figures, for there are thousands of acres in Sussex, Mid and West Kent, Hereford and Worcester that will yield nothing; thousands of acres will not yield more than from 1 cwt. to 1½ cwt. per acre, and thousands that cannot produce 3 per acre. Let it be assumed that there are 20,000 acres in East and Mid Kent, Surrey, and Hants that will give an average of 7 cwt. per acre, or about an average yield; this would make 140,000 cwt. Then put 28,000 acres in Kent, Hants, and Surrey, at 3 cwt. per

acre all round, required to make the total equal to 272,000 cwt. \* \* \*

The best proof that the crop will be short, not more than half an average, is that prices are hardening daily, and range from £10 10s. to £13, according to sort and quality. \* \* \*

After careful examination of the continental prospects, it seems to be certain that really good hops cannot be imported into England and sold under £13 to £15 per cwt.

**BET-SUGAR IN CALIFORNIA.**—The Sacramento beet-sugar factory is reported as under successful operation, the working-up of this year's crop having commenced September 29. The crop of sugar-beets to be worked up amounts to nearly 10,000 tons. The field-gang of 45 men is gathering the crop as rapidly as possible. The factory is worked night and day by gangs of 45 men each, relieving each other. The sugar produced is said to be superior to any other raw sugar in the market.

**PRESERVING GRAPES.**—A French viti-culturist has lately published a process by which he has preserved the freshness, beauty, and scent of grapes as late as the month of April. The fruit is left upon the vine up to the last moment, but must be cut, before the first frost, at the second or third joint below the cluster. The cut end is then covered with wax to prevent the escape of vegetable fluids, and then thrust into a bottle of water through a perforated cork. A little charcoal in the water preserves its purity. The cork is then covered with sealing-wax, air-tight, and the bottles placed in a dry room, where the temperature never falls below the freezing-point, and carefully kept in an erect position, the clusters not being allowing to touch each other. Every imperfect grape must be removed as fast as it shows signs of failing.

### NOTICE.

Wanted, to purchase, by the Morristown Agricultural Society, a thoroughbred Durham Bull, (certified pedigree) one and a half years old.—Parties having the same to dispose of, will please answer through this journal, stating price, &c., or by letter addressed to

ALEXANDER CHISHOLM,  
Secretary Morristown Agricultural Society.  
Antigonish Harbor, Oct. 27th, 1874.

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