

Rinderpest.

THE failure of vaccination as a preventive of the fearful cattle pestilence, has been announced by Dr. Marchison in a letter to the *London Times*. He says:

"The points of resemblance between cattle plague and small-pox are so striking that certain observers were led to hope that vaccination might protect cattle from the prevailing disease. The experiment, I believe, has now been fairly and fully tried, and, although the first accounts appeared favourable, there is sufficient evidence that vaccination confers no permanent protection from the plague. It is well that this fact should be generally known by publication in the *Times*. Rigid isolation and the suspension of all movement of living cattle must still be the preventive measures on which we mainly rely."

This plain statement—from the eminent practitioner who was the first to bring vaccination as a prophylactic into notice—will surely remove the last pretext for any further temporizing measures on the part of the Government. There should now be decided action. The dire harvest of death ought to be arrested by the only means at command. Infected animals should at once be stricken down with the pole-axe and deeply buried, and the spread of the contagion would necessarily cease. This is the simple and serviceable ground which has all along been held by Professor Gamgee. Had his energetic counsels been adopted last year, the ravages of the deadly rinderpest would unquestionably have been stayed long ago. Notwithstanding the derision that was showered upon his "sensational" predictions by certain professional brethren, the "quack," the "alarmist," the "humbug" of 1861, has proved but too true a prophet. It is something in such an emergency, and amid such a tumult of professional opinion, for any man to have been right, and to have ultimately silenced and convinced his opponents. "This," says the *Medical Journal*, "is what Professor Gamgee has done, and it is but just that the credit he deserves should be given to him."

The weekly tabular returns issued by the Privy Council do not impress every one with their full significance. The effect produced on the public mind by a disease that "incubates" before declaring itself in symptoms, which is irregular in the duration and intensity of its attacks, and which is disseminated with varying rates of speed, must necessarily be of a fluctuating nature. It is only when we group the weekly returns into monthly periods that the fearfully uniform rate of increase of the terrible scourge is exhibited. Thus arranged, the grim statistics, up to January 6th, are full of awful interest and of deadly warning.

The 12 Census Divisions, Scotland included.	Four weeks ending Nov 11th	Four weeks ending Dec 9th.	Four weeks ending Jan. 6.
Totals	7934	15 363	29 123

For a round statement, it is sufficiently accurate to say that the above totals are in geometrical progression, doubling every month. This aspect of the subject is far from comforting, but we gather from our recent British exchanges that there is reason to hope that the danger is now fully appreciated, and that something like uniformity of action will be promptly established.

Various opinions as to the nature of the disease are still hazarded by members of the legal profession. Dr. Letheby, in a report lately presented by him to the City Commissioners of Sewers, speaking of the cattle disease, says: "It is living germinal matter, so minute that its particles are probably less than one-hundred-thousandth of an inch in diameter. A single infected animal placed in a public market, or permitted to travel along the highway, may be the means of unlimited contagion."

On the other hand a surgeon, in a communication to the *Manchester Examiner*, propounds the theory that "the Rinderpest is a combination of scarlatina maligna and erysipelas," two amongst the most fatal diseases to which the body is subjected, and requiring treatment very different to what has already been practised both as a preventive and cure.

The Iowa Farmers' Club on Fences.

WE learn from the *Iowa Homestead*, that at the recent meeting of the "Legislative Farmers' Club," the following discussion took place, respecting fences.

Mr. Tracy had great confidence in the Osage Orange—thought it the best fence that could be made. Next to the Osage he ranked the Cottonwood, and thought that in five years it might be grown into a fence. He has fenced his farm on one side with Cottonwood and Willow.

Mr. Palmer said, we want to find out what will make the cheapest, quickest and best fence. It is difficult to dwarf Cottonwood. It is a very rapid grower, and rapid growing plants are often short lived. He has tried weeping willow, but failed to get a fence, the winter killed it. Maple willow will make a wind breaker, but cannot be kept in shape to make a fence. He had tried the Osage and believed it would do. He would not put more than one thousand plants to forty rods, and can purchase them for twelve dollars per thousand. His practice is to let the plants grow two years before trimming them. Leaves are the lungs of plants, and you must not touch the leaves nor prune, until the roots of the plants are well established in the ground. All summer pruning has a tendency to dwarf. Prune in the fall, the winter, or the spring, but never in the summer, unless you want to dwarf, and that should not be attempted until the roots are well established in the earth. He has two hundred rods of Buckthorn hedge on his farm, and it makes a reliable fence. The plant is not so rapid a grower as the Osage. Six years will make a Buckthorn fence. It makes a dense and compact fence. A thorny plant is necessary for fencing purposes. Honey locust is not to be relied on. Barberry makes a good inside fence. It bears a valuable fruit good to use, and beautiful as an ornament if left on the plants in winter.

Mr. Buck said, Cottonwood will do for groves or ornamental planting, but will not go for fencing. Every tree of it will require the land for the distance of a rod around it. Osage Orange is just the thing for a good fence. The seed can be raised here. He knows men who raised a hundred bushels of the apples last season. He agrees with Mr. Palmer in relation to pruning.

Mr. West would not advise any one to be in a hurry purchasing Osage Orange seed this coming spring. The war is now over and there will soon be plenty of good seed. He would sow the seed about corn planting time—say from the 1st to 15th May. He would prepare the ground well and sow the seed where he intends the hedge to grow. Before winter the row of young plants should be well mulched on each side with straw or something similar, to the height of six or eight inches, but not so as to cover the plants. In the spring, spread the mulching on each side; this will keep the ground moist and kill the weeds. Let the hedge grow for three years, then partially cut the plants and lop them over, then trim for two years, some higher each year, and by the sixth year you will have a good fence.

Mr. Thompson said he has one piece of Osage fence ten years old, and it is to-day an excellent fence from top to bottom. He would plant the hedge at the same time that corn should be planted. Let the plants be taken up in the fall, kept moist till spring, then put strong plants near each other, and not weak and strong plants side by side. Buckthorn is not a native of Iowa, it is brought from New Jersey, and some parts of Indiana.

Agricultural Intelligence.

Cheese Factories.

THERE are says the *Rural New Yorker* in twenty-nine counties of the State of New York, 425 cheese factories. Oneida contains 80; Jefferson, 78; Otsego, 35; Madison, 31; Lewis, 32; Herkimer, 31; Oswego, 21; Chenango, 19, &c. The aggregate summary of these 425 factories is as follows:—

Cost of buildings and apparatus.....	\$802,931
Persons employed, male.....	705
Persons employed, female.....	731
Average number of cows.....	128,526
Pounds of milk used.....	307,077,242
Pounds of cheese made.....	32,643,014

The reports of 133 factories for the year 1861, present the following aggregates:

Cost of buildings and apparatus.....	\$378,157
Persons employed, male.....	258
Persons employed, female.....	362
Number of cows used.....	67,034
Pounds of milk used.....	187,822,838
Pounds of cheese made.....	18,042,435
Average number of pounds of milk to one of cheese.....	9,015
Pounds of milk to a cow.....	2,802
Pounds of cheese to a cow.....	253
Value of cheese at 10c. per pound.....	\$3,758,637
Average value of cheese to a cow.....	\$56.75

In 1861 cheese was sold from 10 to 20 cents per pound, the average price being about 20 cents.

The quantity of salt used to 160 pounds of cheese was reported from 377 factories. In 101 of these, the amount used was 3 lbs.; in 87, 2½ lbs.; in 51, 2½ lbs.; in 40, 2-7-10 lbs.; in 19, 4-5 lbs.; in 9, 2 lbs.; and in 6, 5 lbs. The least quantity used was 3-10 of a pound. In Limburg cheeses, the quantity was much greater, ranging from 14 to 17 pounds.

The following table will exhibit the amount of cheese produced in five leading counties:—

Counties	Pounds of Cheese	Value.
Oneida.....	8,107,019	\$1,621,403 60
Jefferson.....	5,357,540	671,569 20
Madison.....	3,420,067	684,011 40
Herkimer.....	3,025,263	618,453 60
Lewis.....	3,171,721	634,344 20
Total.....	21,143,611	\$4,229,722 00

Illinois Wool Growers' Association.

THE following resolutions have passed the Executive Committee of the Illinois Wool Growers' Association:

Resolved, That we are opposed to the renewal of the reciprocity treaty with Canada, and the British Provinces of North America.

Resolved, That on account of the heavy taxation (including the U. S. income tax.) under which we labor, we are opposed to the importation of any wools duty free.

Resolved, That it is due to the American wool grower that he be protected from the ravages of dogs.

Resolved, That it is our opinion, such protection can best be afforded by a National tax on dogs, thus tending to the extermination of many of them, while affording a revenue to the government.

Mr. William Burt, Teviotdale, Minto, sold a hog in Guelph market last week which weighed 633 lbs. It realized over \$50.

A new material for paper making has just been discovered in France. With the root of lucernes M. Caminade has succeeded in making a pulp which can be employed jointly with rags in the manufacture of paper, and even separately.

GROWTH OF FLAX.—The *Markham Economist* says that between fifty and sixty acres of flax were grown within an area of some eight or ten miles of Markham village during the year 1863. The crop generally was a good one, considerably better than can fairly be considered an average yield.

THE HOG CROP IN THE STATES.—The *Cincinnati Gazette* of the 26th ult. says that it is yet too early to decide conclusively the crop of hogs. Packers, however, are confident that the total packing will not exceed 1,500,000, against 2,400,000 last year, and on this faith they are holding their stocks.

TREES ON THE PRAIRIES.—A Mr. Dunlap, of Champaign, Ill., in seven years has grown a forest of silver maples, some of which are 25 feet high. Other persons at the West are growing forests of pine, walnut and other trees. The farmers of the West will do well to commence the growth of forests upon large open prairies as soon as possible.