

sous why good roads should be constructed :

"It has been proved that on sandy roads 30 bushels of grain are a load for two horses ; on so-called pike roads 50 bushels are the maximum load , on macadam roads 100 bushels, and on the best grades of telford roads 200 bushels can be carried. (1) If these figures are correct, and there is no reason to question them, they furnish an impressive argument for the improvement of roads--an argument moreover, which ought to appeal most forcibly to farmers, whose interest in the question has thus far been rather sluggish. The agitation for good roads accomplished little so long as it was discussed from the speculative point of view. People who read appeals on the subject agreed with them in theory, perhaps, but they saw no reason why they should personally do anything in the matter. But there are other practical arguments in favor of good roads that also appeal strongly to the farmer. It is said that certain New Jersey canneries pay two cents less a basket for tomatoes that have been hauled over rubble roads, because they are injured by the jolting they receive."--Wisconsin Agriculturist.

FERRETS FOR EXTERMINATING RATS.

EXPERIENCE HERE AND IN ENGLAND.

Ratcatchers--Sorts of ferrets--Treatment.

EDS. COUNTRY GENTLEMAN. -- It must be that the sporting laws of Michigan contain no provision against the use of ferrets in hunting rabbits, else the rearing of these useful little animals, as described by Mr. W. Z. Hutchinson on page 897, would not be so openly carried on or be so apparently profitable. In this state any one caught ferreting rabbits is liable to arrest with fine or imprisonment to follow, while any owner of a ferret is apt to be viewed with suspicion, certainly by the fee-hunting game constable, and even by some of his neighbors who suspect that many an illegally-gotten pot-pie graces his table.

But the usefulness of ferrets as exterminators of rats seems not to be generally known in this country, or at any rate taken advantage of. In England rat-killing by means of ferrets and terriers is not only the delight of all boys and men, but the professional ratcatcher is a person of no mean importance. His appearance generally with three or four disreputable looking curs at his heels, on his periodical visits to the different towns and villages on his route, is hailed with almost as much éclat as the time-honored circus, years ago he used to carry a tin box strapped to his shoulders on which was painted the British coat of arms with the initials V. R. in big letters on either side, by which it was meant we should understand that he owed his appointment to the express command of her majesty. (2) If I remember rightly, his charge was

(1) Very vague ! 200 bushels of wheat weigh 12,000 lbs ; of oats, 6,800 lbs. Ed.

(2) There really was, in 1835, a "Royal Ratcatcher," under the "Master of the Horse !" We have often seen him with his dogs. Commonly, we used to pay about \$10.00 a year to a roving ratcatcher for an average sized farm. So much per rat? Mercei ; pas si bête !--Ed.

three pence a rat killed and it was sometimes basely insinuated that previously killed rats were smuggled into the count to make his tally as large as possible. Be that as it may, farmers and others gladly availed themselves of his services, judging correctly that their cost was nothing compared to the loss sustained in consumption of grain and destruction of property by rats. There were two kinds of ferrets then in vogue ; one, called the fitcher or fitchew, was of a dark brown color, very nimble and combative and small, enabling it to thread the mazes of any rat's quarters ; the other, called the polecat ferret, was of a cream color, much larger, less active and pugnacious, and was used for rabbit-hunting. Female ferrets are prized more than the male, on account of their courage and ferocity when attacked, necessary qualities when they have to face two or more desparate rats ; it is well-known that a bitch pack of foxhounds or harriers will hunt with more vigor and tenacity (1) than a dog pack.

Large farmers, owners of granaries or slaughterhouses or of any large establishments likely to attract rats should undoubtedly keep ferrets ; but is a question whether it pays owners of small properties to do so, especially in States where ferreting rabbits is forbidden, except for the sake of amusement ; and this amusement is not always easy to find, for when one has visited all the neighbors' barns, pig-pens and granaries within a fair circuit a few times rats, become scarce. To keep a ferret in good "fettle" regular hunting exercise is necessary ; inactivity for weeks at a times makes it sluggish and takes the edge off its keenness for hunting. A well trained ferret at work, assisted by some equally well-trained terriers, is an exciting scene.

Though I kept ferrets and fox terriers for fifteen years in England, I found that my ferrets had outlived their usefulness in less than three years here, and I disposed of them. Neglect in cleaning out or carelessness in feeding will soon end the life of a ferret. A bread and milk diet is a good one, though care must be taken that none is left to sour, else a scoured and sick ferret will be the result. In the meat line I fed English house sparrows, and when these were not obtainable small pieces of fresh, raw cows' or pigs' liver, occasionally putting a pinch of sulphur in their milk. Never feed any meal that has been cooked with salt or, fether still, give raw flesh only. When ferrets are used for rabbit-hunting only, meat can be dispensed with almost entirely. I have heard many old ratcatchers declare that ferrets should never be fed, as it encourages them to kill their enemy whilst hunting, when they gorge themselves and lie in the rats' nest to sleep off their repast. (2)

A young ferret, taken when just weaned kept perfectly clean by constant change of bedding and fed principally upon bread and milk, can be handled (the oftener the better) and fondled without any risk, and there will be very little unpleasant odor attached to it. I have carried them for miles loose in my great coat pocket. The last ferret I had was a female fitchew ; when the door of her hutch, standing about two feet from the ground, was opened, Teaser (a fox terrier) would place his paws upon the

(1) No, emphatically. The bitches have more dash, the dogs more patience over a cold scent. "Va ; je m'y connais." Ed.

(2) Do they live if not fed?--Ed.

floor of the hutch, when she would run down his back, come to where I stood and climb up my legs and body on to my shoulder, yet a keener, braver little hunter never entered a rat's hole. It is best not to lend your ferrets, unless you are sure the would be borrower is accustomed to them ; a timid handler will soon spoil a ferret, and especially is this true when the ferret is coming out of a hole ; it seems to resent irresolution in capturing it and when two or three futile attempts have been made will often back into the hole and there stay ; in addition to which the bungler may consider himself lucky if he does not get bitten. If you have to handle your ferrets with tongs you had better retire from the business. The methods to be employed to ferret a building thoroughly so that no rats escape require judgment as well as a knowledge of rats' habits, and to give them now would occupy too much of your valuable space. J. H. C.

"Monroe County, N. Y."

The Dairy.

THE PREMIUM ON EXPORT BUTTER.

Most of our readers are aware that during the last two years, the Quebec government has granted a premium of one cent a pound on all butter exported, in good condition, to England. The aim of this encouragement having been attained, as we shall show, the premium will no longer be payable.

When MM. Gigault and Leclair visited England, in 1894, they found that the universal demand among the dealers was for regular consignments of butter every fortnight ; whereas our Montreal exporters bought the butter when it was cheap, i. e., in summer, and did not despatch it abroad till the autumn, by which time it had lost much of its fine quality.

In consequence of this treatment, instead of our butter selling in the English market for a satisfactory price, it was regarded as only of third or fourth quality, and was sold to the pastry-cooks, instead of making its appearance on the breakfast-tables of the wealthiest classes.

So, in order to re-establish the reputation of our butter, the local government, despairing, after many attempts, of overcoming the reluctance of the shippers to forward consignments at least once a month, determined to give a premium of one cent a pound to those makers who should export butter regularly every month to England in steamers fitted up with refrigerating compartments.

In 1895, the Federal government arranged measures for the establishment of "cold-storage" on board our steamers: what were the results? Marvellous, indeed, were they, for, the shipments of butter from Montreal to England which in 1894, were only 32, 137 boxes or tubs reached, in 1895, the figure of 63, 664 boxes, and, in 1896, attained the truly remarkable number of 157,321.

And, if we take the valuation of each of these boxes of butter, many of them weighing 70 lbs each, at the very low rate of \$10.00, the increase will appear still more apparent ; since, the value of the butter exported in 1894, when there was no premium, amounted to only \$321, 370.00 ; whereas, the butter exported in 1896, the second year of the premium, was worth at least \$1,573,210.

00, an increase in value of \$1,251,840.00! And how much did this grand result cost the province? The whole amount paid by the province of Quebec for the encouragement of the export of butter to England in 1895 and 1896, was the trifling sum of \$5,000.26.

REFRIGERATORS.

Before the year 1895, several of the lines had built refrigerating compartments on board their boats. Unfortunately, owing to the lack of business, some lines, notably the "Dominion Line," had, in consequence, abolished these refrigerators ; so, it was found necessary to go to work and persuade our makers to try the effect of exporting butter regularly once a month.

We give, here, a few instances of the opinions held by divers dealers on the English markets as to the condition of the butter from Canada when it reaches those entrepôts.

Manchester. Messrs. Pierson and Butter:

"Too stale".

" " Lonsdale and Thompson :

"Almost invariably, stale."

Birmingham: Messrs. Bloomer & Co.

"Most of it unfit for the retail trade."

Liverpool: Mr. George Fletcher :

"Almost always too stale, and consequently unsalable."

Manchester: Messrs. James May & Co.

"Very little ever reaches us, and then, only inferior qualities."

" Mr. A. J. Brownson.

"The condition is bad, and it is generally too stale."

As regards other points adverted to by the circular sent by MM. Gigault and Leclair, respecting any other observations the dealers in England might see fit to make for the benefit of the exporters of Canada butter :

Messrs. Bloomer and Co., of Birmingham replied :

"Make creamery butter, and send it off at once for immediate sale. Pack it properly, surrounded by parchment-paper, and put it into refrigerating compartments."

Mr. Sam. Hughes, Liverpool :

"Weekly consignments, for immediate sale at the market-price then going ; that is the most profitable plan for the exporter."

At page 185 of the report of MM. Gigault and Leclair, Messrs. Nickson and Co., Liverpool, speaking of butter, make the following observations :

"Of all qualifications, uniformity is the most important. Consignments should be made weekly, and by no means intermittently, as at present, but every week, and previous notice of despatch should be sent by cable. Your butter should never be exposed to heat, otherwise its condition and flavour would be found to be seriously affected on its arrival in this country.

Moreover, it is absolutely necessary that the boats by which butter is sent hither be furnished with refrigerating chambers like those on board the Australian steamers."

And the Delegates, MM. Gigault and Leclair, report that :

"All the dealers in England agree in the following advice :

1.--Improve your method of manufacture, so as to make a type of butter of better quality and greater uniformity :

"Send your butter away weekly, so as to prevent its contracting that "stale" taste, so much complained of."