

The Agriculturist.

A WEEKLY JOURNAL DEVOTED TO AGRICULTURE, LITERATURE, AND NEWS.

ANDREW LIPSETT, Publisher.

"AGRICULTURE THE TRUE BASIS OF A NATION'S WEALTH."

ANDREW ARCHER, Editor

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Varieties.

Night and Morning.

I pause beside the darkening pane,
With homelike heart and weary hand;
To watch the fair day die again,
And evening with its shadowy train
Creep slow along the lone lone land.

The west has lost its line of gold—
The clouds hand threatening, near and far;
Heavy and hopeless, fold on fold—
And night comes moaning, unconsol'd
By glimmer of a single star.

And why does hope depart with light?
And why do griefs and fears allow,
And bitter thoughts of loss and blight,
Come crowding back again with night,
Like evil things which fear the day?

Yet none but feeble souls complain—
The world is only dark, not lost—
The day will shine on wave and plain,
The grass and flowers will spring again,
Despite the night, despite the frost.

And when the east, like some far shore
Of promise, broadens, rose-bright,
Visions of darkness vex no more,
For all their legions flee before
The level lanes of the light.

The grief that seemed too hard to bear,
The thought which stung to sharpest pain—
Fades in the heart and golden air,
The rich grows calm, the world grows fair,
And life is sweet and dear again.

The Joys of the Future.

Let me sing of the joys of the future,
The hour that brings it its bliss,
Though the past may be burdened with sorrow,
We'll have not but gladness for this:

Though the cloud of misfortune is o'er us,
And the rain-drops of misery fall,
There are happy hours before us,
Then drop not, what'er may befall.

Oh! mourn not, though travel-stained pilgrim,
If thy journey is lonely and drear,
How'er thy frail limbs may now suffer,
There are others with pang more severe:

For the sigh that in sorrow escapes thee,
Some sufferer aches a groan,
From thy slumber home joys shall awake thee,
While the friendless shall suffer alone.

Oh! drop not, then, delicate flower,
That grows by the wayside of life;
The sun will shine brightly tomorrow,
The morn that shall free thee from strife.

Then let not the young spirit sicken,
With the thought that but revel in pain,
For time the heart will soon gladden,
With joys that will bloom once again.

Let us sing of the days of the future,
And dwell in the joys it will bring,
Let us sing of the ecstatic waters,
That in joyous flows from its spring:

For there ne'er was a grief or a sorrow
In the life of the ecstatic waters,
Yet the sun, as it wakes on to-morrow,
Will shine for us all once again.

He who spends all he gets in on the
road to beggary,
An exchange puts the following
pointed conundrum: "Why is a
newspaper like a tooth brush?" Be-
cause everybody should have one of
his own, and not borrow his neigh-
bour's."

The alderman who was lately injured
by the accidental discharge of his duty,
is reported to be in a fair way of
recovery. He says he'll never be
caught that way again while in the
full possession of his senses.

"Over the Hills to the Poorhouse"
was the title of a new play to be pro-
duced in Battle Creek, Mich., by a
travelling theatre company. The
leading actor got so drunk that he
could not perform, creditors seized the
baggage, and one of the unpaid em-
ployes actually did go over the hills
to the poorhouse.

A gray hair was espied among the
raven locks of a charming young lady.
"Oh, pray, pull it out," she exclaimed.
"If I pull it out ten more will come
to the funeral," replied the one who
had made the unfortunate discovery.
"Pluck it out, nevertheless," said the
dark-haired damsel; "it's no conse-
quence how many come to the funeral,
provided they all come in black."

A learned clergyman in the State
of Maine was accosted in the following
manner by an illiterate preacher who
despised education: "Sir, you have
been to college, I suppose?" "Yes,
sir," was the reply. "I am thank-
ful," rejoined the former, "that the
Lord has opened my mouth to preach
without any learning." "A similar
event," replied the clergyman, "took
place in Balaam's time, but such things
are of rare occurrence in the present
day."

A CANNIBAL IN LONDON.—The latest
novelty in London is a Tonga Islander
one Mr. Mponom-ha-ha. He is nearly
50 years of age, of mild and prepos-
sessing appearance, remarkably in-
telligent, and a practical Christian.
The captain who abducted him had
him instructed, and so remarkably
docile and gifted was he that he is
now lecturing. His lectures are ac-
counts of savage life in his native
land, and are said to be highly in-
teresting. One great personal at-
traction about him is that he admits
that in 1860, when he was a cannibal
of cannibals, and his family ate a
New York missionary. He offered
part of his earnings as lecturer as com-
pensation for this unbecoming banquet;
but no relative has as yet come for-
ward to claim the dividend.

Agriculture.

Cattle Feeding.

We see it stated in the papers that there are 200,000 cattle, and 500,000 sheep feeding in Ontario this season, intended for the English market. This is a very large number, and we think must be over-estimated, but there is no doubt this trade is assuming vast proportions, and a great deal of money is brought into the country by it. Now what are we doing in New Brunswick? Standing idly by and grumbling that farming does not pay, or that we have no market. Is it not our own fault that we have no market, and that beef is now selling at from 3 to 5 cents per lb. and much of it cannot be sold at any price. And no wonder, for we would be surprised if some beef we have seen brought into the city lately could find a purchaser. Poor, miserable stuff, not fit for any one to eat! Do our farmers think that those who are engaged in shipping beef to Great Britain would come here to buy while we have only such wretched animals to sell. We have over and over again pointed out the necessity of improving the stock in order to have a market. If we had ten thousand head of the right quality to sell, we would soon find purchasers at good prices, and there would be no grumbling at dull times in this line; and while so much is said about raising beefs to make sugar from, and building a factory for the purpose, we are confident quite as much money could be made by growing beefs, mangels, turnips and carrots, and feeding them to improved stock, without waiting until a larger capital is obtained to build a factory. We have some good stock in the Province if they were properly fed, but any number can be raised in a short time if the farmers would only look at this matter as their own interest demand. That many tell us they would rather have the native stock than any imported, and many act up to their opinions, for they will take no trouble to get others, or if a fine animal is brought into their district they will not take the trouble to benefit by the opportunity. So long as they adopt this course just so long will they complain of the want of a market. They must not expect purchasers will come and leave their money in the Province until we can give them the animals they want, and whatever we may think of our native stock that goes for very little while the buyer wants another kind. It is a fact that the only cattle that will pay to ship abroad are the improved breeds or their crosses, and of all those the Short Horns take the lead, and will continue to do so for some time yet, and the sooner our farmers make up their minds to furnish the market with the article wanted the better for themselves. Again, we say, get the breeds the purchaser wants and feed them properly and then there will be no trouble about a market, but so long as we only offer our native breed, half fed, just so long will buyers give us a wide berth.

Winter Feeding.

At this season of the year there is nothing, we suppose, that so much engages the attention of the farmer as that of the care of his cattle—of "winter feeding." We have more than once lately had articles on the subject. The following from the *Maine Farmer*, is the most practical and the best suited to this latitude that we have seen:—
In our climate, with a longer period during which domestic animals need to be confined to the barns than in almost any other State—usually averaging from six to seven months—the matter of feeding becomes one of the greatest importance and it is to be regretted that it does not also become more of a study. Winter feeding is at best artificial—the animals of the farm graze naturally; and if June pastures were perpetual they would have just the best conditions possible for their greatest comfort, and the farmer would secure from them the largest profit at the least expense. But half our year is rigid, the pastures fall, and the animals of the farm seek the warm winter quarters furnished by the provident farmer, and subsist upon the forage his diligence and forethought have stored up for them. So that in reality a great part of half the year is spent in labor to bring the animals through the other half—the animals in fact constituting the farmers' wealth, in large part.

Now, winter feeding being artificial there is much reason for the belief of many careful farmers that it is only during the grazing months that cattle make a gain and yield a profit by their increase; and often the remark is made by shrewd men that cattle gain when at pasture only to lose it all

when confined to the barns in winter. Though this may not be actually correct, yet it conforms with the experience of most farmers we presume to say that cattle are thought to be doing well when they "hold their own" through the period of winter feeding—indeed "spring poor" is a term a great many farmers know the meaning of. Now winter feeding of the domestic animals should be such as to provide so far as possible, the nearest approach to the good pasture of early summer which it is possible to do; or in other words, a forage of the best, early cut, well cured hay, with roots to supply moisture and to keep the system in good condition, and provender as an extra force to sustain the strain upon the system consequent upon milk production, hard work, or the processes of reproduction. But instead of a great effort being made on the part of the farmer to secure these conditions for winter feeding, what are, too often, the real means at hand for getting the domestic animals through the long winters? Dry, late cut hay, damaged by rain, or by being left burnt up with the sun, very likely put into the mow wet, and in consequence musty, and plenty of cold water—this is about all. Cattle, and sheep and colts will not starve on such food to be sure, but they will not thrive. It is an utter impossibility for such feed to yield the nourishment necessary to give increase of flesh, or production of milk, or growth of wool. If it furnishes bare subsistence it is all that can be expected.

We are not of those who believe that our winters are too long and too severe for feeding to be carried on profitably, because we have seen too many instances to the contrary to disprove it. In our visits among farmers we have seen numerous cases where, with suitable conditions, the farm animals have not only been kept growing, but yielded a constant profit;—this has been true of milk cows, young cattle, colts and sheep. These conditions are warm quarters, good feed in sufficient quantity not only for support, but for production care and attention. The last include bedding, ventilation and cleanliness, carding, and a particular over-sight of all the animals so far as individual characteristics are concerned, to see that none falter, and that all thrive and gain. But winter feeding is a matter that can hardly be improved upon at this season with the means ordinarily at the command of the farmer, unless provision has been made for it earlier in the season. It is in summer that the farmer must be making efforts for carrying his stock through the coming winter at a profit. In spring the root crop must have attention, or there will be no roots to give variety to the winter feed; the early cutting and careful curing of the grass, that it may not be burnt up and worthless, but come as near dried grass as possible, must also be looked after, that the winter feeding of the animals may be such as will keep them glancing rather than losing.

These brief hints may show how important a matter the artificial feeding of domestic animals is, as a part of the farm economy; and how provisions for it reach backward and forward through all the operations of the year, and enter into all the plans and labors of the farmer. If the calling attention to this matter now, serves to impress upon the mind the deficiencies in the present winter feed in any particular, and stimulates to plans for its improvement another winter, which may be carried out during the intervening season, the object in giving them will have been secured.

Snow the Poor Man's Manure.

Snow has been called the poor man's manure, and there is much reason to believe that it does contribute to the fertility of the soil. The snow-flake has a beauty of its own, when placed under the magnifying glass, but this beauty can well be forgotten in view of the gift of utility it contains within itself, the charm, we may say, that make it of importance in vegetable nutrition. It is not our purpose to inquire whether the snow-flakes of the Northern Winter, surpass in usefulness the rainy-drops of the Winter of some latitudes. Both descend through the air from the clouds to the earth, and in the descent screen or wash the air of many impurities, and place the impurities at the feet of the plant. One of these impurities—ammonia—plants are very fond, indeed cannot exist without. The chemist does not find it in any article of commerce so abundant and so cheap that it can be bought for much less than 20 cents a pound. Though the amount of ammonia brought down to the soil by the snow or rain seem inconceivable when

given in figures, still being a free gift costing us nothing, we may think more kindly of the snowdrifts that leave blockaded roads for a half Winter—if we fully realize that they are to disappear to reappear in the disguise of a bounteous harvest. The snow-flake, the rain-drop, and all the little of nature are when rightly viewed the only truly great thing of nature, as the hour-glass does its duty through the hour, by the dropping of grains of sand, so the farmer must do his by recognizing his fortune to reside in little.

At Rothamstead, England, Messrs. Lawes and Gilbert collected on a rain-gauge having the surface of 1-1000 of an acre the entire rain-fall, dew, etc., for two years. The analysis of the water showed that the amount of ammonia contained in them was equal to 7 pounds one year and 91-2 pounds the next, for an acre of land.

In the waters gathered at Insterburg during twelve months ending March, 1865, an acre of land received from the air 6.38 pounds of ammonia, while the waters collected at Ida Marienhutte, Prussia from April, 1865, to April, 1866, showed the amount of ammonia to be 12 pounds to the acre.

What these figures stand for in practical farming we will realize the better by noting the number of pounds of ammonia called for by particular crops, in the 'formulas' of Prof. Stockbridge of the Massachusetts Agricultural College.

A crop of 25 bushels of buckwheat, consumes about 45 pounds of ammonia; 25 bushels of oats about 28 pounds; 2 tons of rye straw 12 pounds; 45 bushels wheat about 50 pounds; 50 bushels of Indian corn about 78 pounds. The term Natural Fertility has been defined to refer to the amount of plant food annually accumulated in the soil by decomposition, decay and chemical action constantly taking place among its early particles and the remains of life. But in this definition, the quota of plant food supplied from the air and brought down to the soil in snow and rain is overlooked, and it is the more important for consideration, seeing that the amount of ammonia contained in the air is different for different places (most abundant in cities), and that weather conditions determine the proportion of ammonia washed from the air.

The Potato Disease.

The *North British Agriculturist*, of December 25th, publishes a prize essay, by a Mr. Simon Prince, of Forest Hill, near London, on the potato disease, which strikes us as presenting new ideas as to the cause of the blight, and as suggesting an original method of contracting it.

What is called the potato plague I consider not a plague but a blight. We do not characterize the disease called consumption, which afflicts and carries off so many of our fellow countrymen, as a plague. To my thinking, what is called the potato disease stands in the same relation to its consumption does to our fellow men. I am humbly of the opinion that the disease is potentially present, even in the tubers that are apparently free from it, just as we find individuals in families where consumption carries off the rest apparently free from the seeds of that insidious malady. I consider the potato, as we now have it, as being generally in a morbid state, and highly susceptible of most atmospheric causes, which I look upon as generating or developing the potato blight.

If the potato plant with its tubers arrives at the stage we call ripe, before the blight takes place, the potatoes almost, or altogether, are unscathed. What is the reason of this? None other than that they are more able to resist atmospheric causes. I have observed, that with sultry, close, fiery weather in the early part of the season—say about the middle or end of July—the 'blight' is generally very virulent. If, on the contrary, the weather is clear and fine until about the first or second week in August it is much less so.

Again, take the following: On digging potatoes, you will find there are what we might call three stages or generations of the tubers. Some are so loose in their tie to the stem that they remain in the soil, or among the earth mould, when the 'shaw' is removed. The second generation easily shake off from the stem; but the third require to be picked off. Examine these three classes in relation to the disease. Among the first there is but little—sometimes no trace of it; in the second there is more; in the third most of all. What does this again prove? Why, that in proportion to the ripeness of the potato, it is able to resist the atmospheric action. It is thus evidently a matter of resistance, as the constitution, so to speak, is solidified, or otherwise.

Or take the following: Examine

the same field. Some rows are occupied with plants whose shaws are comparatively green and vigorous. Others beside them present plants whose shaws have lost all growth and greenness, and lie whitened or browned in the drill. Which drills does the blight affect? Only those whose plants were green, because their constitution was less able to resist it than those of fully developed and ripened vigor.

Or yet again you have another proof. In the same field the potatoes, on an average, are all at the same stage of ripeness or otherwise. But some are situated in a comparatively dry or sandy soil, the other in a wet and clayey. In the dry and sandy you find the disease, but in a very subdued state; in the wet and clayey, it is developed to its highest and most vicious form. This affords the proof that the fruit, being in a green and less ripened condition, is less able to resist the inroads of the disease as developed by atmospheric causes.

Here it may be asked, what has caused this generic debility in the potato plant or root? This may be due to a variety of causes. One doubtless is that the plant or tuber is not indigenous to British soil. As Europeans lose vigor and degenerate in Asiatic climates, so the potato in ours. Added to that we have the unnatural forcing of the plant with too rich manure; and also there should be taken into account the too frequent practice among farmers of cutting the seed, days and sometimes weeks before they are planted. They are thus debilitated by the atmosphere of their natural sap, which is their life force. I have observed sometimes one end of a field of potatoes blighted and the other sound—sometimes the middle of a field blighted and the sides sound.

Now, here arises a very important question—how, in any one field, all planted with the same manure and the same care, there should be such a difference? It surely must be due to atmospheric causes. Potatoes being atmospheric feeders, and being planted in such a weakly state with strong manure, makes the ground almost like a retort. When the air is over-charged with electricity, it is more than they can bear, and the very elements which should be their support become their destruction. Then should close, drizzly, foggy weather follow, the slightest flash of lightning coming over the potatoes (either whole or part of a field) acts like fire on a box of lucifer matches. Should this weather happen when potatoes are in full vigor of growth, the shaws will have a bad odor, and decomposition set in within twenty-four hours. The most of the potatoes change into a pulpy state, presenting all the appearance witnessed in beasts or human beings when struck by lightning.

What led me to detect the first or incipient stages of the disease was the following circumstance:—In the first year of the potato blight I was residing with my family for two months on the banks of the Holy Loch, opposite Kilm. One morning I went up the river fishing. On my way I observed the plot of potatoes which was behind the house, as being in a very healthy state. During the day the weather became very sultry, with a small, drizzling rain: at the same time the atmosphere was oppressive—so much so, that breathing was difficult with me. Towards evening a very moderate thunderstorm came on with heavy rain. When I came home with my fishing rod, I observed that portion of the potato plot which lay open to the loch was quite laid down, while the protected part of the plot was quite healthy. Next morning I went to the unhealthy part of the plot, and found a very bad odor arising from it. Carefully taking off the earth from one or two of the stems, I found two or three of the potatoes were to all appearances sound, two or three were partially blighted, giving out a bad odor when cut—and two or three were in a pulpy state. Following so speedily upon the state of the weather described above, led me at the time to form the opinion that the two were co-related, as cause and effect. Ever since I have watched and observed that a like atmosphere has preceded the appearance of the potato blight. I conclude, therefore, that the potato blight is caused by electricity. This is not so much substantiated by the fact of an undue electrical condition as by the results mentioned.

It may here be asked what remedy I would propose for arresting the blight. It is simply this. I would have poles 30 or 40 feet in height raised at certain distances in the potato field; the distance required would need to be the result of subsequent experience. The poles would have to be sunk sufficiently deep in the soil to secure their upright position—say four feet. Then an electric conductor to run up alongside of

the poles, and also into the earth at least five feet, pronged at the top with three or five prongs. My conviction is that such lightning conductors would gradually take down the electricity rushing across the fields, and save the potatoes.

The cost of this experiment may vary according to circumstances—say from two to three pounds at first; but the poles, &c., would be available for years, as they could be transferred easily from field to field when necessary.

Wintering Sheep.

The first month of winter, more than any subsequent period, determines the success of the flock through the feeding season. The maximum quantity of food should be reached by gradual increase from a beginning, extending back into the grazing season, and maintained at the point where it is thoroughly consumed. The poor economy of under feeding has often been deprecated in these columns. Indefensible under any normal condition, it is doubly so when the cereals are as cheap as at the present time, in the agricultural sections. Corn is selling at a majority of the stations within 200 miles of Chicago at less than 25 cents per bushel. In view of this fact, the flockmaster who permits his sheep to pass through the winter in any condition short of No. 1 makes a mistake, which next spring will bring home to his appreciation with an intensity that will not allow it to be forgotten.

The propriety of feeding corn in heavy quantities in somewhat of an open question with breeders in the Eastern States. The writer recalls an instance in which so eminent an authority as Dr. Randall questioned the propriety of feeding over half a pint of corn per head daily. This sounded oddly to men who had daily fed three bushels to the hundred sheep, for years in succession, with an added bushel when fattening was desired. The experience of many practical flock owners is that, if prudently increased from a small beginning, all the corn that sheep can be made to eat can safely be fed through the entire winter, if accompanied by hay, or other well-cured fodder. This course implies the opportunity for exercise under proper conditions of weather. But it is rarely necessary for the farmer to depend so entirely upon grain for the sustenance of the flock. He can utilize straw, rye fields, and other dead capital about the farm. The value of stalk fields in corn growing localities is rarely sufficient appreciated by the stock owner. Very few men gather corn so carefully as not to leave a half bushel or over to the acre. This, with the dried blades and the grasses, and weeds which too often creep in, will be thoroughly culled out and utilized by the flock, if permitted access when the weather is dry and the ground frozen. The almost ubiquitous cockle bur is the great drawback to this item of foraging. In its absence, the stalk field is commended to the farmer who is the owner of sheep as a source of profit and convenience. Not only is there an immediate benefit realized upon the sheep, but much of the labor of clearing the field for a subsequent crop is obviated. The seed of weeds and grasses consumed in winter leave so much less to be fought by the husbandman the following season, while the droppings from the animals add to the quantity and quality of the grain yield. This foraging upon stalk fields, combining as it does the essentials of food and exercise, with the distribution of manure where it is most needed, should prove an incentive to a cultivation that will eradicate burs and other wool-damaging weeds from the corn-field, in which even a double gain will have been realized, not alone to the farmer but to the whole country as well.—*National Live Stock Journal.*

How to Raise Ducks.

With all young poultry, the natural mother is the best calculated by nature to take charge of her own offspring, inasmuch as there are many requirements which instinct teaches them, and which are equally adapted to both mother and progeny, when both are of the same kind. A hen is not a suitable mother for young ducks. Ducks are considered by the majority of people as hardy birds and easily reared, and so they are with their natural mother, but with a hen mother it is a different thing. A hen is an uneasy, restless creature, ever on the move in the daytime; whereas the duck mother is quiet, and her movements are slow and cautious with her young ones, seldom treading on them, while the hen frequently tramples on her brood—but when of her own kind, they soon learn to keep out of reach of her outspread toes. With cries of her own offspring

she is familiar by instinct, while she is often deaf to appeals from the duckling or gosling.

A sitting, clucking hen, or one with young, is apt to pick quarrels with the other fowls; and if allowing full liberty, will have frequent battles with her neighbours, to the great discomfort of her brood. In a measure, her chicks are somewhat accustomed to these pugnacious proclivities, and do not suffer so much as the young ducklings. The duck mother seldom fights, but still is master of the poultry-yard, generally speaking. She is a quiet, comfortable sort of a body, enduring her isolation from water with commendable fortitude. As fond as ducks are of their stagnant pool or stream of running water, they are quite as well without it, and thrive with only sufficient water to drink. The duck mother sits about among her brood of fifteen or sixteen, with her soft webbed feet, set on treading on any, and will generally bring up her entire number, if allowed to have her way with them. She should not be coupled up, but if necessary may be confined with her ducklings in a yard. Ducks are great foragers, and greedily devour insects, they are fond of, and search for grasshoppers and crickets, with the agility of turkeys. Strictly speaking, they are as much the farmers' fowl as the turkey, as both require long ranges and plenty of forage.

"No doubt," a writer of some years back states, "we are a wise people in our generation, but not from all eternity. God has been wiser than we, and hence were intended to hatch and bring up their chickens and ducks to rear young ducks. Ducks are prolific egg-producers, generally making a nest on the ground, in a private place, yet not far from home. It is useless to undertake to keep ducks for profit and allow them the range of a large running stream. The water makes them wild and blots everything else out of their habits, and they frequently drop their eggs in the water, a thing which they never do when kept in the yard. The nest is made on the ground, usually under the shelter of an unused coop, or under a thick mat of bushes, or a misplaced board, that is raised sufficient from the ground to afford admittance to the duck. The nest is deep and soft on the earth, and the bird does not like to have it disturbed by its keeper. She will take good care of her eggs. She makes her nest soft with the feather from her own nest.

Many years ago, there was kept a brownish grey duck of the premises of the writer that was very often given to mischief, troubling the hens and driving them about the yard and away from the feed and drink. Still she was suffered to remain with her mate among the hens until, when she surprised us with seven or eight young ones every year. In the course of five or six weeks she and her brood became exceedingly troublesome and she and her progeny were sent to market. A few days later, in the same nest, bedded down with her feathers, I found sixteen eggs. Then my heart smote me, and I have never been able to forgive myself for the cruel treatment of the faithful old bird and to this day I forego the practice of sending birds alive to the city markets. Allow them to part with their own premises with full fed bodies, rather than suffer the cruel torture of hunger and pain in market stalls. I may be foolish, but life is full of pain and suffering, with a sudden, quiet death alleviates.—*Country Gentleman.*

Covered and Uncovered Manure.

Some years ago, says an experienced farmer, I had a lot of sheep wintered in a building and yard fenced in with high palings to keep out worthless curs. In the second story of the building hay was kept for the sheep, and fed to them under the building, which was open at one end, some six or seven feet high, into the yard where troughs were kept for feeding grain. During the winter manure accumulated under the building to twelve or fifteen in depth and extended gradually tapering to the ground, out into the yard. At the edge of the building the manure was about twelve inches deep. In the following autumn, when I went to haul out the manure for wheat, I found that immediately outside of the edge of the building, where exposed to the weather, it had rotted and sunk till it was only six inches deep, whilst that immediately under the shelter was still about a foot deep.

I took a cart and oxen and drew the manure which was on the outside of the building, and put it on a strip across the field intended for wheat, then drew out the same quantity in

THE TILLYFOUR CATTLE AT THE LONDON CHRISTMAS MARKET.—The *Agricultural Gazette* speaks very highly of the Scotch cattle which appeared at the London Christmas market, and pays the great compliment to Mr. William McComb of Tillyfour of placing him at the top of the list as regards the quality of his stock. 'Scotland was never better, or perhaps we should say Aberdeenshire and the adjoining counties—the southern counties of Scotland being more of a corn growing character. The alleys of Mr. George Dickson and Mr. Gibblet merit special notice for the large consignments from Aberdeenshire. There is also a large number of very fine Scotch polled beasts that have been fattened out in England. Mr. Dickson's large scale of 450 beasts contains more crosses than pure polls; early maturity, weight, and quality being the obvious object of Aberdeenshire farmers in crossing with shorthorns. In this they illustrate the most successful example of fattening in the market, both sides of the alley presenting a very uniform degree of successful breeding and fattening highly creditable to the north. In Mr. Gibblet's alley, the fifth Scotch polled beasts consigned by the celebrated breeder, Mr. McComb, are considered the toppers of the market. We do not recollect reporting such a fine lot by a single producer of this breed, the whole appearing as if cast in the same mould."

NEW MIXTURE FOR WOOLLEN GOODS.—A new effect may be produced in all kinds of woollen goods by mixing china grass with them. The object is to profit by a property possessed by the grass of not taking the same dye as the wool, consequently when the latter is dying the vegetable fibre retains its whiteness and gloss. It is best to mix the two fibres before the spinning, say on the carding engine or the loom, and to take the china grass a little longer than the wool, to enhance its effect; the best proportion is ten to twenty per cent. of the former to ninety or eighty per cent. of the latter. The yarn thus spun is used for warp as well as for weft. The wool employed may be carded or combed wool. The cloth can be raised and milled as usual and woven in any desirable manner. The drawback to the use of china grass for textile manufacture—namely, its liability to retain creases—is thus reduced to a minimum by the great elasticity of the wool.—*Textile Manufacturer.*

COUNTRY LADS.—Boys who are fortunate enough to be born in the country have unmistakable advantage over city lads. The country is the place of all others to be born in. The associations of youth, of home of school, winter, and the farm work and play mixed together in a delightful tangle, are never repeated, but grow deeper into the character and become dearer to the being while life passes and the revolving years hold out. It is worth more than a university education to have been born and brought up on a farm, of well-to-do parents. That supplies what no learning from the books ever can. That is a resource that stands by. It is something to feed upon. And if the boy as a man engages in business or a profession, he has a stock of health and a sound constitution to draw upon that will carry him triumphantly through when the city boys are giving way all along the road. Morally and physically, he has by far the best of it.

EXTRAORDINARY DAIRY COW.—Mr. E. T. Funnell's 'Duchess St.' is an extraordinary dairy cow. A few weeks ago the whole of her milk for seven days, always milked by one man, was kept apart from that of any other cow, skinned also, and churned separately, under special superintendence. The butter made from those seven days' produce weighed eighteen pounds but for two ounces. Besides this, 'I think her,' Mr. Funnell remarks, 'the finest flesh-grower I ever saw.' Mr. Tunnell's further informs us that his cows when in full milk in the summer made an average of over ten pounds per cow, weighing good eighteen ounces to the pound!—*Bull's Weekly Messenger.*

Scaly legs in fowls are caused by a parasitic mite which burrows under the skin of the shank and feet. They may be destroyed by applying a mixture of lard and kerosene oil.