

ENGLISH FARMING.

We in America are very proud of our large barns, and I have been always in the habit of patting myself on the back over what I consider a very good one at Ogden Farm. I was surprised at first to see an almost entire absence of barns for storing hay and grain in England, where rain probably falls on twice as many days in the year as it does with us. The more I saw and thought about it, however, the more I came to the conclusion that there is much to be said on their side of the question. They save the cost, and it is a very considerable cost, of building hay-barns. Their stacks are far enough apart for the rest to be saved if one takes fire. They are very handsomely made, placed on wooden or iron frames about two feet above the ground, are considerably larger at the top than at the bottom, and are nicely thatched with wheat straw. Some are round and some are square. I saw in one instance a very handsomely made and well thatched stack of hay containing over one hundred tons, and on the Earl of Warwick's Sewage Farm there was a row of twenty-two stacks, containing each about five hundred dollars' worth of wheat all so well built and so closely thatched that they might stand there for ten years without the least danger. Whether the stacking of hay in England accounts for its superior quality I do not know, but although the last season was an unfavorable one, it seemed to me that all the hay I had occasion to observe was better than the best we usually see at home; greener, and more savory. Owing to the projecting top and thatch of the stack, there seemed no appreciable injury to the hay from weathering.

The great question in all good agriculture of the world is the manure question. It is even more important in England than it is as yet with us, but they resort almost universally to a means of securing it of which we may make much more general use; that is, in the manufacture of meat by the use of grain not grown upon the farm. As a general rule, farm products in England are not much higher in price than in our Eastern States. Meat retails for just about the same price, yet every good farmer makes it part of his regular business to buy beef cattle or sheep, and to buy American corn, or linseed, or cotton seed, with which to feed them. The demand in England for American pork is always good and reliable; it pays, therefore, to import corn from Illinois to fatten pork for the London market. If, as one of our writers has said, "fifteen bushels of corn can be packed into a pork barrel," it must be much the better plan for the Illinois farmer to convert the corn into meat on his own farm, and send the product to market at much less cost for transportation, especially if he has begun to appreciate the value of manure. Here in the Eastern States we have to pay more for our grain than the Western man does, but less than the Englishman, and there is hardly a limit to the extent to which we may profitably manufacture meat for that market (should our own soil give out, which is not likely), making an immense amount of the most valuable manure for our own fields.

As a general summing up of the impressions brought home from my trip, I would say that I am thoroughly confirmed in my old faith that the only good farmer of our future is to be the "high" farmer, and I desire to reinforce, as far as possible, all my previous statements to the effect that the great benefactor of the world is he who makes four blades of grass grow where only two grew before.

I have a neighbor who has produced these four blades. I offered him the other day one hundred dollars for the summer rent of two acres of new grass land (clover and timothy). He said that he could make double that by devoting it to sheep, and I finally told him, as he is a fair man, that he might make whatever allowance he thought fair for the cost, risk and management of his sheep operation, and I would give him the balance, to have the land this summer. I have no idea how much I shall have to pay for it, but I am confident that, as it lies near my barn, I can, by getting two or three soiling crops from it, make money by my transaction. — *An Agriculturist.*

CATTLE, CORN AND GRASS.

By Isaac A. Hedges.

The stock growing interest of the West is every day becoming more and more important, and yet there is no department of our agricultural pursuits that is more susceptible of improvement. In fact, with very few exceptions, the whole business is done upon the very old foggy plan of "rough and tumble," that is, cattle allowed to run at large and wild in the summer, and out in the storm and cold in the winter. With such wild grass as they can find, either good or bad, and often scant at that, with sometimes water and sometimes not, and not unfrequently stagnant and unhealthy in the former case — with shock or ear corn in the latter.

Now, in this way of growing and fattening beef cattle, the operator finds the result to be

about this, to-wit: — "He buys a three year old steer, say in April, weighing 700 pounds, grazes until October, then he feeds until April, feeding six months, or 180 days, at the rate of about half bushel corn per day, when he will find he has made his steer weigh about 1,200 on foot, which he may sell at 4½ cents as second rate beef, making him a return of \$54, costing him, first —

700 lbs., at 3 cts. per lb.	\$21 00
Grazing 6 months, at 50 cts.	3 00
90 bushels of corn, at 25 cts.	22 00
Leaving a balance of	7 00
There is to be credited to this about 150 lbs. of pork at, say 3 cents.	4 50

Net total.....\$12 00
We will state the results upon the improved plan of feeding, taking the same weight and cost of animal for a basis, viz: 700 lbs. steer, at 3 cents, \$21.

Grazing on tame grass, 75 cents per month for six months.	\$ 5 00
60 bushels of corn, at 25 cts.	15 00
Extra expenses in feeding.	2 50
Cost of steer at	43 00
Weight at the close of year, 1,400 lbs., first quality, at 5½ cts.	77 00
150 lbs. pork at 2 cts.	4 50

Total.....81 50
Less cost.....43 00

Net total.....\$38 50
Here we have a difference of \$26 50 upon each steer of 700 lbs., provided our estimates are correct.

Now, we propose to show that the above estimates are entirely within bounds, and can be realized by any feeder who adopts the best methods of feeding. In the first place, this, like any other business, should not be undertaken by any person until after a thorough investigation, and then only to such an extent as the means at hand will enable the party to do it thoroughly, for "that which is worth doing at all is worth doing well." It is not worth while to especially advocate tame grass pastures as preferable to pasture, as it is usually known and admitted to be superior; but the feeding season is the one to which we must look for loss or gain. The months of August and September are, some seasons, rather severe on cattle. The common enemy, flies, and some seasons druth, cuts short both grass and water. The former can be guarded against by cultivating corn in narrow drill rows, putting in about 24 quarts of seed per acre, where the land is well adapted to corn. From this can be cut green feed that will afford relief during periods of short grazing. Should there be no drouth cutting short the pasturage, this corn can be cut and shocked for winter roughness to supply the place of hay, and if cut by a cutting-box, and mixed into a hot slop and allowed to steep in a covered box, will prove one of the best qualities of food for not only fattening stock but milch cows, increasing the quantity and greatly improving the quality of milk, making a rich yellow butter. Farmers in the West give too little attention to a proper provision for their stock in the winter. Stalls are indispensable to a profitable business in stock raising.

I am aware of the common objection that is made, viz: the cost. Now, let us consider this a few moments. Suppose Mr. A. has 50 head worth in the fall \$30 each, making a total of \$1,500; now, suppose he sells 15 head at \$30 each, he will realize \$450; this sum will build 35 stalls at cost of \$13 each, which is an ample allowance, where lumber is not to exceed \$25 per thousand, as I shall show you by an estimate soon to follow. Now, the difference in the result of feeding, or even wintering stock in stalls and open fields, will be greater on the 35 head than the cost of the stalls were, if the feed given them is of the same preparation.

It is scarcely requisite to show why this is the case, because the experience of every feeder who has given any attention to his own business, has taught him that in all stormy weather, and also during such days as the mercury ranges from 15° above zero and downward, stock will not increase in weight, however well fed; not only that, much of the time they will actually lose, especially if they are compelled to drink "ice water," as most all are, (provided they get any at all). Now, it is fair to estimate that during the months of December, January, February and March, taking one season with another, at least one third out door feeding is lost, and as such stock will require one-half bushel corn per day, it will result in a loss of twenty bushels per head, besides the other forage and labor of feeding.

In support of this showing, I will quote here a synopsis of a report from a feeder in Champlain County, Illinois, as appeared in the Chicago Tribune, February 20th, 1871. He said he fed in stalls 80 head of 3 year olds, coming 4, and out-door 60 head of as good steers of same age, and all with same kind of feed; that the latter ate more corn than the former, and were not in as good condition at the close of feeding. This satisfied him that out-door feeding would not do. — *From the Illustrated Journal of Agriculture.*

PUFF ON AGRICULTURAL COLLEGES.

The Buffalo Express says: — Of all the highly developed humbugs which have received the fostering care of the American people, probably the average agricultural college, as at present conducted, is the most finished specimen. It fails more completely than any other institution to do the thing which it was designed to do. Princely endowments have been bestowed on these bucolic seminaries in every State of the Union, immense tracts of public lands have been taken from the actual settler to build them up, and yet we do not believe they are turning out enough practical farmers annually to yoke up a pair of two-year old steers. What do young men do when they go to Cornell? They study Latin, in order to learn the nature of crops; astronomy, to find out about the character of various soils, and rhetoric in order to understand the breeds of bulls. We judge so, at least, from what we have heard and from the annual circulars which the managers send out. — *Prairie Farmer.*

HOING POTATOES.

The Ohio Farmer says: — "One of the secrets of success in potato growing is in giving them a hoeing at the proper stage of growth. One hilling is sufficient, and this should be given when the vines are about six inches high. Previous to this, use the cultivator freely; keep the earth loose on the surface and free from weeds. When at the stage of growth mentioned, give a good hilling, making the mound broad and flat on top and a little cupping. After this do no more than to cut out weeds. The hoeing is best done soon after a rain. Some advocate flat culture and others two hillings; but we have never succeeded with either of those plans, nor do the most successful potato-growers advocate them. Two hillings will make two settings, and result in a large number of small potatoes at harvest time. Flat culture may do on a deep loamy soil, where the roots can ramify and form tubers readily; but a clay soil hilling in the old-fashioned way is the one most certain to make good returns."

SHAVING THE MEADOWS.

A correspondent of the Country Gentleman discusses the question why the hay crop is growing lighter from year to year. Among other things he says: — "Another reason has been whispered, which is this: That on account of the great competition among the different mowing machine manufacturers, as to which machine will shave — yes literally shave — the surface of our meadows the closest, the roots of the grass are really and permanently injured in leaving them bare, and thus very liable to be frozen out absolutely. We believe a good deal of clover is killed out in this way, the crowns being sliced off to the very roots. Close mowing of grass, like close cropping of the human hair, is a very senseless practice. The 'velvet cut,' as it is called, which makes men with dark brown hair look for all the world like monkeys, deprives the head, to all intents and purposes, of its natural protection. So 'shaving' the meadows deprives them of their natural mulching, which is such a protection against the droughts of summer and the rigors of winter."

POTATO EXPERIMENT.

James Wells, of Chicopee, Mass., plowed deep and harrowed a piece of ground, swarded apart each way, put soda on the bottom, raised down, and on them cow stable manure, about two quarts in each hill; cover this lightly with soil; cut one bushel of Early Rose potatoes so as to have but one eye in a piece, and put two pieces in a hill, six to twelve inches apart. The ground was kept free from weeds, and the hills made high and large. The product was 51 bushels of potatoes, 48 of which were suitable for the table. The ground measured 4,280 square feet, or a fraction less than one-tenth of an acre, and therefore the crop was at the rate of over 500 bushels to the acre.

MULCHING. A correspondent of the Cincinnati Gazette says: — "For the last ten years in setting my trees I have used a compost composed of about equal parts of rotten wood, leached ashes and light barn-yard manure. Pursuing this plan I have succeeded beyond my most sanguine expectations. Especially is this true in regard to light soils."

The best sugar factory at Freeport, Illinois offers \$4.50 a ton for beets delivered on the cars at the city.

The Horse.

THE HORSE IN THE STABLE.

The following sensible remarks are made by a correspondent of the Western Rural:

In selecting a site for the horse-barn, a high and dry situation is essential in order to drain the stable, purify the atmosphere around it, and preserve the health of its inmates. The stable should front the south to shelter stock from the prevailing cold winds, and give them the benefit of the warmth of the sun. It requires to be thoroughly drained and well ventilated. Damp, filthy stables, full of vegetable matter and foul air, are the prominent causes of such fatal disorders as bring fevers, influenza, farcy and glanders, that destroy annually so many valuable horses. Fresh air is indispensable to supply the place of that which has been once breathed, and take away the fumes of ammonia, always found in close stables, depriving the atmosphere of its life-sustaining elements till it is not fit to breathe. Next to ventilation, light is essential to the health of horses.

Blindness, as well as other diseases, has been attributed to dark, ill-ventilated stables.

The domesticated horse is more predisposed to become blind than any other animal. The cause must result from over exertion or mismanagement in the stable. The wild horse is seldom found blind. This shows that close stables have a potent effect in spreading the infirmity. It has been said that dampness in brick walls may be obviated by extending the roof over the gable ends and sides some two or three feet. The projection makes the barn cooler in summer and warmer in winter, whether it diminishes the causes of disease or not. Apertures for ventilation, always left open, will renovate the stable by the constant escape of the foul air, and the re-supply of the pure element.

Air, when deprived of its oxygen by breathing, becomes unfit for respiration, and the influence of pure air upon the health of horses may be demonstrated from the fact that horses running at large escape those diseases that afflict others compelled to breathe the confined air of close stables. The infection arising from poisonous gases may be more conclusively proved by the fact that horses kept in perfectly ventilated stables are not subject to one-tenth of the maladies that infest filthy, undrained, ill-ventilated ones. The feet and legs of the horse are the most difficult for the groom to keep in condition. — Some horses get cold legs, and require hand-rubbing to restore the circulation; others become feverish in the feet and legs and require wet bandages to relieve the inflammation. Washing the legs in cold weather cannot safely be permitted, except they are thereafter rubbed dry. Cracked heels and swelled legs are the consequence of suffering the limbs to dry by the slow process of evaporation.

The grasses are the natural and most essential food of the horse. Turning out to grass will prove a sovereign remedy for inflammatory diseases. It also relieves, and sometimes entirely removes, chronic disorders. — Hard, upland meadow hay is preferable to lowland grass for trotting and running horses, eight pounds a day being about the usual allowance to fast workers. The draught or slow working horse should have all the hay he will eat. Old oats are sweeter, more nutritious and easier digested than new oats. — They are the most profitable when one year old. The roadster in active service will consume daily from 12 to 16 quarts of oats. The draught horse will work on from 10 to 14 quarts per day.

Regular hours of feeding are as necessary as a liberal allowance of food. The fast horse must be fed often and in small feeds. They cannot go fast on a full stomach. The diver, boxer, wrestler or runner must regulate his diet to correspond with the active exertion required of his physical powers. Trotters get little food or water on trotting days; runners are muzzled to prevent eating or drinking until after their race is over, for all work that materially forces the breathing should be performed on an empty stomach. Young horses ought to be worked moderately, so as to gradually harden the flesh, enlarge the tendons, and develop a sound constitution. Overtaxing the muscular powers before they are matured tends to weaken the joints, relax the cords, and puff up the legs, from which they may never recover; and the soft, half-seasoned horse will take more food than those in good working condition.