

BUYING FERTILIZERS.

Why It Pays to Purchase Them in the Shape of Feed for Live-Stock.

Ordinarily the average farmer can not afford to buy feed, nor can he to any great extent afford to purchase manure. If the farm has been allowed to run down through continued cropping without manuring or rotating so that the field has run down below a profitable margin, it may do to purchase commercial fertilizers in order to increase the yield. The principal dependence of the farmers must be upon barnyard manure and rotation.

If by using commercial fertilizers you can increase the yield of the crops so that more stock can be kept, and thereby increase your supply of farm-made manure, there may be many Western farmers who can make the investment profitable. So feed. If you have a good supply of corn fodder, wheat or oat straw, timothy and clover hay, you can buy bran and oil meal generally and feed with profits. For this reason, wheat or oat straw in themselves are not a complete feed. In fact they are of considerable less value of either of the others. But by taking clover, wheat, or oat straw and bran or meal, say in a feed of twenty-five pounds, you can give eleven each of clover and wheat or oat straw and three pounds of bran, and you have a feed equal to or nearly so to twenty-five pounds of good timothy hay—by combining you make the straw nearly equal in value with hay—because it supplies what the clover and bran lacks and then makes up what is deficient in the other. This, of course, greatly reduces the cost of feeding and in many cases considerably increases the supply. Profitable feeding implies having good stock and then feeding so as to secure the largest gain at the smallest expense. It does not pay to feed stock unless you can secure a steady gain from the start. But at the same time the expenses should be made as light as possible in order to increase the profits; under such circumstances feed can be purchased and fed out with profit.

If properly managed securing a large crop should enable us to feed an increased number of stock. Then if fed under good shelter, using all necessary precautions to make and save all the manure possible, we can secure a larger amount of manure, and with good management this ought to increase the yield of the crops again.

In order to secure a start of this kind you can purchase fertilizers and often you can purchase feed with profit. If your farm is ordinarily rich, and is not cropped out by following one crop with the same year after year until all the plant food required for that variety of crops is nearly or quite exhausted. By adopting a plan of rotation and economical feeding the fertility can be gradually increased. More stock fed and marketed and your profits will be increased accordingly.

I buy bran for milk cows the year round because the larger flow of milk and the increased value of the manure is sufficient to give me a good profit. Good clover hay and bran as a staple food is one of the best and cheapest feeds for milk cows I can obtain, and the quality of the manure is considerably increased by this combination. I do not mean to imply that every farmer will find these his cheapest feeds, only give my experience. Bran in nearly all cases increases the value of the manure and in a run-down farm can nearly always be used in combination with other foods profitably. And it is good economy when you are attempting to build up the farm to take advantage of each combination as can be done profitably that will enable you to feed more stock and secure more manure.—N. J. Shepherd, in Des Moines (Ia.) Leader.

How to Polish Cows' Horns.

First boil the horn to remove the pith, if it has been freshly taken from the animal; but if it is an old, dry horn the pith may be dried out, and the boiling is not necessary; but it may be laid in hot water for a short time to make it soft. Then scrape off all the roughnesses with a coarse file, a knife or a piece of glass. When the rough spots are removed rub around the horn with coarse sandpaper, then with a finer kind. After this rub the horn lengthwise with a flannel cloth which has been dipped in powdered pumice-stone or rotten-stone, and moistened in linseed oil. This rubbing should continue till all the sandpaper marks are removed, then give a final rubbing with a clean flannel cloth, and lastly with a piece of tissue-paper.—Chicago Inter Ocean.

—Leave was given Peter Smith, a young man near Winchester, Va., to drink all the cider he could hold, and he hung to the barrel until he fell over in a sort of spasm, and he lived only an hour after getting home. It was probably the first time in his life that he had got something for nothing, and he lost all prudence.

—The brooch is said to be presented to the bar in the present time.

PROGRESS OF INVENTION.

The Advance of Physical Science During the Last Hundred Years.

One who takes a bird's-eye view of human progress sees that the race has advanced, not in a straight line, but by a series of tacks, like a vessel beating against a head wind. The progress made in physical science, which has been very great during the last hundred years, is the result of a series of small advances from one point of knowledge to another, not very far away.

The most important invention of the past one hundred years is the steam-engine. Its most effective applications have been to manufactures and the propulsion of ships. When steam navigation was first proposed, Sir Joseph Banks, President of the Royal Society, said: "It is a pretty plan, but there is just one point overlooked—that the steam-engine requires a firm basis on which to work." That was the opinion of a theorist, and as such was not heeded by a practical mechanic, William Symington, who said: "Let us test this theory by an experiment." He put a steam-engine into a double-hulled boat, the paddle-wheels of which had been worked by men turning a capstan. The men soon became exhausted and the boat stopped; but the steam-engine turned the wheels and the boat towed vessels. Then Fulton improved on Symington's plan, and steamboats, going against wind and tide, proved that the philosopher's theory had overlooked "just one point"—the mechanic's ability to build a stable foundation in an unstable boat.

When it was proposed to unite England and America by steam, Dr. Lardner delivered a lecture before the Royal Society "proving" that steamers could never cross the Atlantic, because they could not carry coal enough to raise steam during the whole voyage. The passage of the steamship Sirius, which crossed the ocean in nineteen days, knocked Lardner's theory to pieces. The "wooden walls" of England have given place to "walls" of iron. But when it was proposed to build a vessel of iron, many persons said: "Iron sinks; only wood can float." But experiments proved that the miracle of the prophet could be repeated, and now not only ships of war, but merchant vessels, are built of iron or steel. The change was timely. The last wooden line-of-battle ship built for the British navy required four thousand two hundred loads of timber, the growth upon seventy acres of ground for eighty years. The merchant ships which Great Britain builds annually would, if built of wood, require eight hundred thousand acres of timberland.

Even that wonderful invention, the telephone, which seemed to burst upon the world as a complete novelty, may have to be classed, after all, among the gradually developed creatures of men's thoughts. If we could believe all the evidence that has been taken in the numerous telephone suits, not one man, but half-a-dozen, men, invented this instrument and put it in successful operation. Whether that evidence is true or not, it is certain that several people were working in such a way that experiment must soon have brought either of them to the invention of the telephone. It is also important to note that in its first form it was only a scientific play-thing which further study and experiment have made a practical, an indispensable agent of communication.

Another example, not so noteworthy, but one of vast importance, nevertheless, may be given—the "elevator," as Americans call it, which the English call a "lift," but as it is a Yankee invention we should have the naming of it. Before the introduction of this appliance even city buildings were not built very high. Anything above the third story was practically inaccessible and could not be rented only for storage purposes. Now the only limits to the height of buildings are the solidity of the foundation and the crushing strength of building materials. While the high cost of land leads capitalists to erect very high structures, the elevator has made the highest rooms the most desirable, as they afford better light and air.

These and other beneficent inventions have grown up from small beginnings and gained maturity just when the human race needed them in order to make another "tack" in its progress. The hostility and criticism which have opposed these inventions have been of great service. They have compelled inventors to make haste slowly and to study nature's laws. Not fair winds and smooth seas make sailors, but waves and tempests.—Youth's Companion.

—A man purchased two old pictures from a second-hand furniture dealer in Nashville, Tenn., recently for one dollar each. After cleaning them up he discovered they were famous pictures by Carl Vernet. He sold them for fourteen thousand dollars to a collector, who has sent them to Paris.

—A new theory is that lock-jaw is contagious.

CHINESE COSTUMES.

Exquisite Holiday Embellishments of San Francisco's Mongol Maidens.

During the celebration of the New Year in the Chinese quarter there are many rich and beautiful costumes to be seen worn by the almond-eyed damsels of the city. The love of bright colors is not more marked among the negroes than among the Orientals, and richness of apparel ranks with them above dainty food and domestic cleanliness. The blending and association of colors exhibited in their dresses is very interesting and not a little peculiar to the Gentile eye. No contrast to the Mongol eye is too striking; no mass of colors too glaring, and no single shade too vivid. Nor are the women alone in their desire for showy dress. The men also delight in brilliant hues, delicate lavenders, golden yellows and verdant green.

The young Chinese girls are particularly gay in their dress. Their love of bright colors is not limited to the clothes they put on, for their faces are always highly crimsoned with Chinese red and their hair is plastered and ornamented with flowers, jewelry, beads, laces and gaudy ribbons. Some of their costumes are picturesque enough and the bold contrasts of glowing colors are worthy of note.

One Oriental damsel who was airing herself and her finery simultaneously on Dupont street wore a pale blue silk coat with huge funnel-like sleeves trimmed with black and pale yellow silk braid. Her trousers were of black silk, also embroidered with pale yellow; her boatlike sabots were embroidered with blue silk, and the deep white soles provide an area of about three square inches for the maid to stand erect upon. Another Celestial maiden was simply dressed, except that garment which among Christians is peculiar to males was a gorgeous orange silk, and her stockings, evidently of American make, were of red silk with clocks up the side. A third girl wore an azure blue skirt, a crimson coat and bright green trousers. Still another wore a pale violet cloak over a dark blue blouse, her trousers also being green. A very brilliant costume was a crimson silk coat with a broad band of green and red embroidery running all around the skirt, neck and sleeves; the trousers were bright blue and the shoes prettily embroidered in pink and gold. A pale blue cloak, violet trousers with yellow trimmings, pearl-beaded head-dress and finely-worked silver bangles on wrists and ankles formed the principal features of the costume of a small Mongol maiden, who held in her hand the diminutive cue of her small brother who trotted before her. The boy was hardly less attractively dressed, and his pale pink silk round hat was decorated with a bright-red silk knob and huge tassel of the same material and color. Some of the smaller girls wore sleeveless jackets over their under-garments, very much like the men. One wore a silken under-garment with a white satin, sleeveless jacket and trousers also of the same soft-shaded material as the under-garment. One of the strangest dresses of all was a salmon-colored silk coat with lengthy skirts, from under which peeped out a pair of bright-green trousers, embroidered with black and pink silk. The older women are much more quietly dressed, generally wearing but one color, and that of a dark shade, such as violet, dark blue or purple.—San Francisco Chronicle.

Important Libel Case.

Can one libel a dead man? This question, which had already been partly answered in the case of Reg. vs. Labouchere (the Duke of Vallombrosa case), has now been finally disposed of by Mr. Justice Stephen at the Cardiff assizes. To libel the dead, said this learned judge, in the course of a most lucid and interesting judgment, is not an offense known to our law; for "the dead have no rights, and can suffer no wrongs." But let the blasphemer beware. For, though you can not libel a dead man, you can libel a living man under the mask of a dead one, and in that case the law has you in its clutches. For instance, "there are terms of abuse which, taken literally, reflect only on the character of a man's mother," but which are nevertheless libelous even if the mother be dead, since their obvious intent is to traduce the living. Alike in his rule and in his exceptions, Mr. Justice Stephen's judgment seems excellent good sense. It leaves the dead no worse off than before—they have still two to defend them, "God and the worm"—and it takes a grievous burden off the shoulders of living editors.—Pall Mall Gazette.

—In Nevada there are some of the largest dams in the world for storing water for mining purposes. One is 576 feet long and 75 feet high, another 425 feet long and 100 feet high.

—Hundreds of antlers of the elk are shipped every year from Oregon and Washington Territory to England, where they grace ancestral halls as ornaments.

A VERITABLE BRUTE.

Meek Mrs. Bowser Shows Her Husband Up in His True Light.

I suppose that Mr. Bowser is like the majority of men in putting his best side before the public. The other morning when he left the house he knew that baby was sick, I had a headache and the cook was disabled by cutting her hand on a piece of glass. I had told him that we were out of butter and coffee and potatoes, and he said he would stop and order them. Once on the car he forgot all about it, and at half-past eleven, meeting an old school-mate, he insisted:

"Now you come right up to dinner with me. I want you to see my house and my family and have a visit."

"But your wife won't be expecting company."

"Oh, you come right along. My wife and my house are always ready for any visitors I may bring home, and your presence won't cause an iota of embarrassment."

At eleven o'clock I told Jane to pick up any sort of a dinner for Mr. Bowser and at twelve Mr. Bowser and his friend entered the house. Leaving him in the parlor, Mr. Bowser rushed in on me with:

"Get into your Sunday clothes as soon as possible—dress the baby up—tell cook to have three kinds of meat—send for a nigger to wait on the table, and run through the room and pick up things."

"Mr. Bowser, have you been idiot enough to bring some one home to dinner?"

"Of course I have. What is there wrong about that, I'd like to know?"

"Well, where are the groceries you were to order?"

"Groceries? I—I forgot!"

"Jane can't use but one hand, while I should faint away if I tried to dress. You'll have to take him to a hotel."

"Never! When I invite a man to partake of my hospitality I'll never skulk him off to a hotel! It is a pretty state of affairs that my house is all upset in this manner at this time! Mrs. Bowser, you and I must have a reckoning! I'll be hanged if I put up with such conduct as this!"

And then he returned to the parlor and I heard him say:

"Will, old fellow, I find a note from my Birdie (that's me) stating that she has taken the little angel (that's our wall-eyed baby) over to her sister's for the day, and our idiot of a cook didn't expect me home and has no dinner ready. We'll have to go down to the restaurant."

"That's all right. You've got a beautiful home here."

"And the nicest little wife, and the prettiest little baby in the world!" exclaimed Mr. Bowser as he slapped his leg. And the other evening as we sat by ourselves he suddenly inquired:

"Was there a man here to-day to see about selling me some fruit trees?"

"Why, no. What on earth do you want of fruit trees?"

"What does any one want of fruit trees? I suppose your advice would be to surround our premises with a line of basswoods."

"But where can we put 'em?"

"We? I shall set them out on this lot, of course. I might just as well be raising five hundred dollars worth of choice fruits each season as to raise nothing but grass and weeds."

"Well, I suppose you'll have your own way."

"Oh, you do! Well, if you can convince me that the way of one born in Coon Hollow, brought up on Johnny cake and educated in a ten by twelve log school house is better than mine I'll adopt it!"

Just then the door bell rang and he went through to the door. Some friends had come to spend the evening, and Mr. Bowser greeted them with:

"Hip! hurrah! Well, this is a genuine Godsend, and no mistake! Pussie (that's me) and I were just wishing somebody would drop in."

I entered the parlor after two or three minutes and had scarcely welcomed the visitors, when Bowser patted me affectionately on the shoulder and said:

"Now, cherub (that's me), run and bring our little darling (that's our wall-eyed) and show him off. He's just the sweetest, cutest, nicest little rose-bud in all this world, and every body admits it."

We played cards and had lunch, and during the evening Mr. Bowser called me many other fond names, and when the subject of diamonds happened to be mentioned he exclaimed:

"By George! that reminds me! Say, deary, we are to go down to Smith's at ten o'clock to-morrow and have you select the stones for your ear-rings."

When eleven o'clock came and the last guest had been bowed off the doorstep, the mammoth grin which had hovered over Mr. Bowser's face all the evening disappeared like a flash, and he turned on me with:

"Now, then, Mrs. Bowser, you got that gang in here to break up my evening and eat and drink out of my pocket, and if you see another new dud inside of six months you just ring me up by telephone!"—Detroit Free Press.

TURKISH BEGGARS.

How Mendicants and Fearers of Burdens Are Organized in Constantinople.

Generally the eye first rests upon one of the numerous beggars, who are always at hand, muttering their words of praise to the donor of a penny, or their curses to the unheeding passenger. The majority are blind, or pretend to be so, and each one has his preferred spot, where he sits in his rags, perfectly oblivious to all but his own wants. Others are hideously maimed and the offensive part is always held up to view in the hope of exciting pity. These are mostly men. The women and children have their beaten track, over which they follow people and implore alms. They seem to go no further, and often by the emphatic repetition of "hiddy git" we rid ourselves of them sooner. We seldom see them-rewarded, except by Turkish subjects, and it is said that they give freely, as the Koran requires it of them. They are particularly generous on all days of special religious observance. At such times these beggars congregate in the most attractive places, and doubtless make large sums. We learn that many of these pitiable-looking creatures are in reality very well off, and only don their poverty for the sake of trade. They have meetings, and there decide where to take up their positions and how to divide their spoils.

The peculiar tread of a man's heavy feet excites our wonder, and we look only to be horrified at seeing a human being bowed under a load that would make a horse groan. Often, too, three or four of these "hamals" work together, carrying their burdens by means of long poles. They have their resting-place about half way across the bridge, and to us it is a great relief to see them there having a little breathing spell, and what an immense relief it must be to them. People here consider them not much more than beasts of burden, and thus their life is so much the more pitiable. They dress in a very clumsy manner in coarse loose clothes and the weight of their great flat leather shoes must be something astonishing, while their leather-cushioned pack saddles alone would be heavy enough for an ordinary person. Each locality has its company of hamals, and they all live together off a common fund and hence work into each other's hands. For instance, we cannot get just one of them to draw water because the others want to carry it from a distance and have us pay them by the load. If we wish two hamals to work for us they make a great fuss and want the whole company to come and bother, for the wages are to be divided no matter how many or how few do the work. They have one head man who does all the managing.

They are not allowed to bring their families from the interior, and they seem to lose all their individuality living huddled together so, without any of the comforts or pleasures of a home. We can not imagine harder physical work than they do, and yet their pay seems to be in the inverse ratio, for it is very little each one gets when a whole company shares it. Articles that are too bulky for them to handle are transported on the backs of horses and donkeys. What would we in America think of seeing bricks, sticks of wood and even long pieces of lumber tied together and carried this way instead of in wagons? I have seen a donkey so covered with boxes that the animal itself was entirely hidden. The vendors of bread, meat, fruit, etc., carry their wares on their heads or on donkeys, according to the quantity they have to dispose of. Their cries can be heard almost from one end of the bridge to the other, but one must know what they sell before their monotone can be guessed. The most picturesque of these vendors is the Persian, with his long, fur-lined cloak and one shoulder covered with his rugs and skins which are always so attractive.—Constantinople Cor. San Francisco Chronicle.

—They were sitting in the orchestra, chatting between acts. She—"They say that there are some awful things said about Miss Cluatcher, and Mr. Strutwell, they say, beats his wife terribly, and they do say that he spends more than half his time off the stage in the company of Miss Limerlins, the premiere danseuse." He (turning the subject)—"Did you notice the thoroughly artistic manner in which Mr. Actwell performed that trying scene in the first act?" She—"O, dear, no; I'm not interested in such things, you know."—Boston Transcript.

—The Pittsburgh Chronicle-Telegraph says: "We are going to build at least two thousand miles of railroad this year." We've suspected all along that some of the Pittsburgh papers were making money.—Chicago Journal.

—A Vienna writing master has written forty French words on a grain of wheat that are said to be easily legible for good eyes. It has been placed in a glass case and presented to the French Academy of Sciences.