

FARM AND GARDEN.

If rye is kept closely grazed and no seed allowed to form, its roots will live for several years and form a turf, the young leaves of which are eagerly eaten by all kinds of stock.

Horses' feet need especial care during the wet weather of spring. Dry their feet and legs before putting them in the stable. If they are allowed to stand with muddy feet and fetlocks, cracked heels will be the result.

Don't suppose that you can jam the roots of fruit trees into small holes of poor soil, and have them do well. Unless you are willing to do the work thoroughly, and to give them a fertile soil, better not plant fruit trees at all.

MILK FOR YOUNG COLTS.—It is recommended by those who have tried the experiment to give cows' milk to young colts to drink instead of water, as it is notorious that mares rarely have sufficient milk for the proper nourishment of their colts. All who have bred colts, whether cart or thoroughbred, cannot fail to notice how soon the youngster begins to eat with its dam any food that is in the manger or crib. If a large supply of milk could be introduced to the young sapping no doubt the desire for the other food would be lessened and it would avoid eating too much corn or grass or hay—food that is adapted to an older stomach, and which requires more digestive operations than the delicate stomach of a two months old colt is possessed of. Good cows milk could be sweetened to make it more closely resemble the mare's in taste, for no doubt the quality of mares' milk, like that of asses' is far richer than cows. Milk is the natural food for infant animals, and it is cheaper and better to bring up the young colt or calf or lamb on milk than on any other substance.

HOW MUCH WILL KEEP A HORSE.—A horse weighing from ten to twelve hundred pounds will eat about six tons of hay, or its equivalent, in a year. And we suppose the real point to get at is, whether one can keep his horse cheaper on some other product than hay. This is an exceedingly difficult question to answer—it depends so much on circumstances. We shall not attempt to answer it fully at this time, but will say that, in our opinion, three and a half tons of corn-stalks and two and a half tons of corn, would keep a horse a year, in fully as good condition as six tons of hay. We may estimate also, that it will take three and a half tons of oat straw and two and a half tons of oats, to keep a horse a year. A bushel of oats weighs thirty-two pounds, so that it will take over one hundred and fifty-five bushels and three tons of straw to keep a horse a year. It will take about two acres of good land to produce this amount.—American Stock Journal.

HOGS—EARLY MATURITY.—There is no profit in keeping a hog until it is eighteen months old and, although such an animal may possibly reach the weight of 400 pounds, the heavy weight will not compensate for the food consumed. A pig farrowed in April and slaughtered about Christmas will more than return his cost, for it must be taken in consideration that during that period he will be but a pig, and the earlier feedings small in quantity. He should weigh 250 pounds when killed, especially if a grade Essex or Berkshire, and the carcass will contain a fair admixture of lean and fat. Very large hogs are very often only fit for the lard tubs, and very often only for the soap maker. The quality of the meat influences the price, and the difference of only one cent a pound amounts to quite a sum in the whole. The profitable hog is the one that is grown quickly, fatted without delay and marketed before it begins to consume the food laid up for winter.—Farm and Garden.

THE TEATS OF COWS.—When a cow loses one of her teats it does not follow that her actual value is impaired, except as it may make milking more difficult. After the milk veins have become accustomed to the change, all the milk secreted

will go to three teats as well as to four. Losing a teat is an indication that a cow is or has been a great milker, and may, therefore, be worth more than one that has never had any such difficulty.—Am. Cultivator.

Barley is the best food for fattening young geese.

HOW TO FERTILIZE FRUIT TREES.—Here and there on all farms, and in most fruit gardens, will be seen an occasional tree or grape vine, which seems to lack vigor—does not grow well, and yet seems to have no particular disease. The probabilities are that the tree is dying of starvation and needs a liberal supply of food. When you give it this ration, do not pile a load of manure around the trunk of the tree or the body of a grape vine. That is just the place where it will do the least good. Nearest the trunk of the tree the roots are all large. The fibrous roots—the feeders, are further off near the ends of the roots. These only can take up the nutriment. It is always safe to assume that the roots extend as far from the trunk in every direction as do the limbs of the tree, and to properly fertilize, spread the manure all over that area. Then fork it in and you have done a good work and done it well. If some disease has begun its work on the tree, you will put the tree in a healthy, vigorous condition the better enabling it to successfully contend against its enemies. We have seen numerous old pear and apple trees, bearing poor and gnarled fruit, which the owners consider of no value, but with such treatment as we have outlined above would restore them to their original usefulness. Try it and be convinced.

When a tree in an old apple orchard dies, dig it out and fill the hole with rich dirt from the roadside and a quantity of manure. Then do not plant a new tree in the same place as it will be of no use, as the roots of surrounding trees will find the new feeding place and effectually starve out the new comer. The trees on either side will bear far more in an increased crop than the new tree ever would, if it lived to be fifty years old.

THOUGHTS FOR FARMERS.—Keep the best and sell the rest.

Weeds exhaust the land as badly as useful crops.

Better kindle the fire with dry wood, than a heated temper.

There is more profit in keeping one good animal than two poor ones.

Brains are the cheapest fertilizer that can be employed on the farm.

Nearly all diseases arise from impure air or water, or from intemperance.

Weeds are most easily and cheaply killed when just appearing above ground.

The manure bank is of more importance to the farmer than the money bank.

A portion of green feed, in winter, is better for live stock, than medicine.

HOUSEHOLD.

Cut flowers in vases should have a fresh supply of water every morning; the dead buds and decayed leaves should be taken away, and the end of the stalks cut off. All these leaves should be removed from that part of the stalk that is in the vase. When the flowers begin to hang the head and show a general aspect of languor, cut off the ends of the stalk with a sharp knife, and put them about two inches deep in warm water for a few minutes; but as warm as you can hold your hand in without pain; the moisture will make its way through the cells of which the stem is composed, and if they be taken from the warm and immediately replaced in fresh cold water the flowers will revive and yet live for some days or hours longer, according to their kind. They should not be exposed to a hot sun.—Ladies Floral Cabinet.

A box 10x10x10 inches will hold just half a bushel. Such a box may easily be made, and is very convenient to have on the farm. It is cheaper and just as good as a more expensive measure.

SCIENCE.

OPERA BY TELEPHONE.—When the new opera 'Lauriana' was produced recently for the first time, at the Lisbon Opera House, the King and Queen of Portugal were in mourning for the Princess of Saxony. The etiquette of courts prevented their royal highnesses from attending, and their despair thereat added to their grief at the loss of the Princess, was like to have overwhelmed them. If Mohammed could not go to the mountain, the mountain must come to Mohammed. And so he brought the opera to their royal highnesses—by telephone.

Six microphone transmitters were placed about the front of the operative stage in multiple arc. They were mounted on lead and soft rubber pedestals to prevent disturbance from the vibration of the building. Each transmitter was fed by three sets of batteries, which were switched on every twenty minutes in succession to keep on the current strength. There were receivers at the palace end for the use of the royal family, who thus heard the opera from beginning to end.

Among the recent patents is one for the combination of a holy water font and a poor box.

Nova Scotians are to read several papers before the British Association in Montreal. Major General Laurie will read a paper on the Agricultural resources of Nova Scotia. E. Gilpin will describe our gold fields. Deputy minister of marine Smith will tell about our lighthouse system, and L. Z. Jonas about our fisheries.

PHOTOGRAPHING A FLASH OF LIGHTNING.—From the Scientific American we learn that this has actually been done. Mr. W. C. Gurley of Marietta Observatory writes as follows: 'The reproduction of a flash of lightning by photography would, a few years since, have been deemed quite an impossibility, but the introduction of the rapid bromo-gelatin process has rendered it not only possible but comparatively easy of accomplishment. The accompanying photograph (a picture of which appeared in S. A. with this article) was from a negative taken by myself during a thunder storm which passed several miles south of the observatory on the evening of May 4.

Wheatstone has demonstrated by direct experiment that the duration of a single flash of lightning cannot possibly exceed a millionth of a second. That a photograph showing the detail of the one mentioned could be taken in this inappreciably short time seems quite wonderful not to say incredible. The plate employed was one of Cramer's extra rapid, and developed with strong pyrogallic developer.

It will be observed that the flash is not of the usually depicted zigzag form and that it seems to be alternately contracted and expanded in its passage through the atmosphere.

Taking the interval between the flash and the report, I estimated the distance from the camera to have been about five miles.'

VARIETIES.

Showmen who run on the road complain that nowadays the lithographers who get up their gorgeous posters make all the money there is in the business. Well, why shouldn't they? Theirs is generally the only part of the show worth seeing.—Boston Transcript.

A Norristown mother is making a move to have a fire-bell tap every morning between six and seven o'clock. She says that when she calls her fourteen-year-old boy it takes him more than half an hour to dress, but when he hears a fire-bell tap, he's out of bed and dressed in about three minutes.—Norristown Herald.

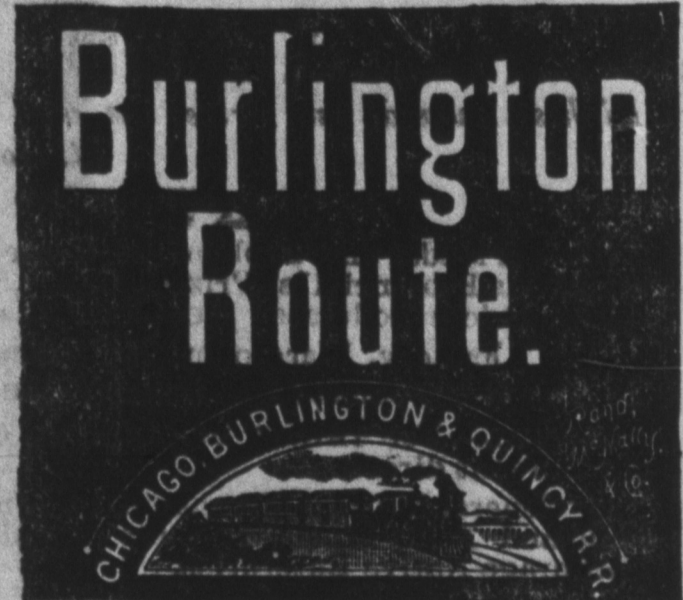
A man will burn his fingers lighting a cigar with a piece of paper and make no fuss about it, but when his wife asks him to set the teakettle over and he takes hold of the warm handle, he is mad enough to wreck the kitchen.

She was admiring herself and a \$25 spring bonnet. 'Do you think it becoming, dear?' she asked of her young husband. 'Yes, I do,' was his response; 'I think it is becoming very decidedly dear.'—Cincinnati Saturday Night.

The power of the press is great. A few weeks ago a party sent us a piece of poetry entitled, 'Hail, Gentle Spring,' and though we didn't even publish it, the next day spring hailed the biggest kind of hail.—Kentucky State Journal.

'Yes, you may come again next Sunday evening; but'—and she hesitated. 'What is it, darling? Have I given you pain?' he asked, as she still remained silent. 'You didn't mean to, I'm sure,' she responded; 'but next time don't wear one of those collars with the point turning outward.'—Amherst Student.

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