FOR FARM AND GARDEN.

MIXED GRASSES.

A good mixture of grasses for hay is timothy, red top, meadow fescue, orchard grass, and tall oat grass—six pounds of the first and ten to each of the last per acre. Thick sowing is necessary for the reason that a portion of the light chaffy seeds may not grow. For successful growth of grass the following requisite must be provided, viz.: Good soil made very fine, fresh seed evenly sown, and a final light harrowing after sowing. Seeding alone early in the spring is most advisable. A dry spell following will not be hurtful if the seed is covered in with a light harrowing on fine soil. The above-named grasses will not run out if the meadow is occasionally fertilized or manured and is not pastured too close late in the fall.—[New York Times.

CAUSES OF COLIC.

"Colic in our horses," says an English veterinarian, "is generally the result of careless or improper feeding. The stomach of the horse is small and limited, and if the horse is hungry and overfed, or is allowed to gulp down a big feed, colic is the result, or if musty hay or musty or sour food is used, or if fresh-cut grass wet with dew or rain is hastily eaten in large quantities, colic is often the result. The careful, thoughtful man who feeds his horses regularly rarely has cause to complain with. More frequent feeding of small feeds is better than too much feed at once. See the skilful horseman on the ship with his horses tied up without exercise, the cuts down his feed to keep the horses with keen appetites. A very little overfeeding produces colic. Too much cold water when the horse is heated and tired is a fruitful source of colic, as is also too much green food, which from its abundant nature is liable to undergo fermentation.—[Western Agriculturist.

EXPERIMENTS IN FEEDING PIGS.

The object of some experiments made at the Kentucky station was to determine the relative values of shelled corn, corn meal and corn-cob meal for fattening purposes and the length of time these feeds would produce pork at a profit. In the trial it was found that corn meal does not fatten so well as shelled corn. Nitrogenous food produced less flesh but a more hardy development than did nonnitrogenous foods. The following is a brief summary of the results:

1. Shelled corn produces fat more rapidly than other feeds tested.

2. Corn produces fat at a cheaper rate than other feeds tested.

3. Shelled corn produced pork at a profit for 56 days. Cornmeal produced pork at a profit for 63 days. Corncob meal produced pork at a profit for 74 days.

4. The Chester Whites fattened more readily than the Duroc Reds on the same quantity of feed.

5. The nitrogenous foods produced so little gain in live weight that it may be attributed to growth and not to fattening.

6. Cottonseed meal could not be fed profitably.

7. Much cornmeal meal was wasted in feeding being picked over and refused.

8. The pigs fed on nitrogenous foods were so much stronger than the others that they caused them serious injury when turned out to run together.

9. Of the nitrogenous foods tested, that of cornmeal and skipstuff in equal parts was the cheapest.—[New York World.

FEED FOR COLTS.

When feeding lots of many purposes seem to think any delay in putting down a full supply is dreadfully wasteful of time. Why a horse's time should be thought of so much consequence would puzzle them to tell. If they feed whole corn it must be put through the shelter and thrown out for bedding. When them as in their eagerness they gobble their mouths full, and then, stretching up their necks, let all go down in a heap. Much the better way, if corn is to be fed at all, is to shell it slowly and throw it among straw, to be scratched over before all of it is found. Smaller grain, as wheat or oats, is better than corn, and partly because some time scattered among straw it is harder to find. For the same reason, if meal is used it must be wet to enable the chickens to eat it faster. Young chicks are often killed by wet food. It clogs in their little crops, which must need just the exercise that digesting whole grain would give. An unused organ soon becomes not only inactive, but unfit for action. So the dyspeptic hen becomes dumpish, and finally dies, all from the effect of unskilful feeding. Young chicks a week old will eat whole wheat, and even earlier they will eat it if broken into small, hard bits.—[Boston Cultivator.

MAKING AN ASPARAGUS BED.

That is if you have not one already. Every owner of a garden should have a bed large enough to afford a liberal supply of this early, palatable and wholesome vegetable. It is the earliest vegetable that can be grown in this climate entirely in the open air, and, if properly cooked and served, most people are fond of it. Old gardeners and writers on gardening made the directions for starting a bed so difficult of execution that most farmers, who have but little time to devote to the garden, were frightened out of an attempt to cultivate it.

The ordinary directions for the preparations of garden soil for vegetables are applicable to asparagus, namely: Make the soil deep, fine and rich. It is perhaps advisable to spade up the asparagus bed rather deeper than would be necessary for most other vegetables, as the crown of the roots should be planted about four inches beneath the surface and the roots will penetrate to a great depth in search of appropriate food and moisture. If you follow the old directions and trench a plot for the asparagus, throwing out from eight to twelve inches of the surface soil and then breaking up the subsoil a spade in depth, the soil will be deep enough. As you turn the surface soil carefully break up all lumps with the back of the spade. A plot equal to a rod square will afford a liberal supply for an ordinary family when it gets well started. It is well to dig in a good dressing of fine stable manure with the surface soil, but it is not essential, for you can top dress the surface every autumn if you wish.

After breaking up the earth for a bed rake the surface fine with the steel garden rake. Then dig drills about six inches in depth lengthwise of the bed about three feet apart. Then place good, strong one year old plants eighteen inches apart in the rows, placing their budded crowns whence the young stalks start, about four inches below the surface level, spreading the roots out in the trench. Now cover the crown two inches and leave the remainder of the trench unfilled until later. The soil around the young plants will warm up much quicker and the shoots start sooner than if the trench should be filled to the surface. As the stalks grow the soil can be drawn around them until the trench is filled. Some would plant the roots closer than three feet by eighteen inches, but in asparagus bed sixty and half a century and will in a few years be one mass of roots it cannot be the distance named.

For the first two years a want to keep the tops growing moderate again fall growth, for it needs roots for them. If we then have every stalk the sun. To cut the ground freezes for winter, cut down the tops, take them off and fork the surface with rich stable manure, not forgetting the salt. Early the next spring fork in the manure, and as the shoots appear and warm up and lighten the surface to stretch it. The asparagus beds may be made more early as the ground will allow to work.—New York Herald.

[illegible]

Don't depend on the [illegible]

Eight sheep may be kept for every cow.

A fine [illegible] is better than a [illegible] farm.

Don't depend on [illegible] and [illegible] of fruits and vegetables.

A little [illegible] of the [illegible] will [illegible] all the [illegible]

There is [illegible] wrong at the end of the row when a grower of a new variety [illegible]

The [illegible] matter [illegible] are not always one hundred cents on the dollar.

Styles For Horse Women.

The [illegible] the attire of lady riders seems to have become fixed, for a [illegible] ago Bournemouth was scandalized by the appearance of a lady riding on a cross saddle, in trousers. Since certainly most a female woman, for the shortness and [illegible] of the popular seemed to have no effect upon her. Habitual riders, however, deny that ladies intend to adopt the manly saddle, and they ought to know. One tailor has devised a novelty which is a kilted or [illegible] of the divided skirt for riding purposes. The habit skirt is divided at the back, and the home material forms wide leghes. The great advantage of the skirt is that should the rider have a fall, there is nothing that could catch on to the saddle, and I should not be surprised if it was adopted by many enthusiastic followers of the hounds. I believe there is one saddler in London who confesses to making cross saddles for ladies; but he admits that the sale for them is extremely small. Some women there are to whom riding is the be-all and end-all of existence, and these occasionally ride out on cross saddles, but this only in the privacy of their own grounds. Perhaps now, with the example of the Bournemouth lady before them, they may grow more bold; but though I rejoice in the freedom of woman, it is a change that should be very sorry to see. The manly costume is never becoming to the form of lovely woman, and I hope that, for the sake perhaps of a little extra comfort, they will not adopt masculine habiliments.—Philadelphia Telegraph's London Letter.

A SUBMERGED RAILWAY.

THE INGENIOUS SCHEME FOR LOADING SHIPS

A Valuable Mine Very Inexpensively Worked.

The mines of Orton, near Bilbao, North Spain, have long been celebrated for their richness in the yield of iron ores suitable for the manufacture of steel, but great trouble has heretofore been experienced in the shipment of the mineral on account of the difficulty of placing it on board of the ships. England and the Continent are the great markets for this product. The coast adjacent to these mines is high and rocky, exposed to the full force of the sea, there being no harbors in the immediate vicinity. At the foot of the rocks there is a sloping shore which extends out to a considerable distance, with an even grade. It is upon this incline that the remarkable railway we are about to describe has been constructed.

The roadbed of the railway has a length of about [illegible] feet and a width of [illegible] feet, on which two sets of parallel tracks, each [illegible] feet wide, are placed, constituting a four-rail railway. The gradient for [illegible] feet to the hundred. Down which traverses the railway, upon which the ore is conveyed from the cliffs to the ships, consists of a high metallic tower made in the form of a pyramid having a wide triangular base. The tower is mounted on wheels, which run upon the quadruple railway track before mentioned. The platform of the tower upon which the loaded mineral is placed is about [illegible] feet high from the track, a height which is sufficient to raise above the decks of ordinary vessels when the tower is run alongside the roof, and from the platform the discharge of the ore is made directly into the hold of the vessels. The great retaining tower is operated automatically. It is composed in its [illegible] of a strong wire rope [illegible] power [illegible] At the bottom [illegible] some [illegible] and [illegible] upon [illegible] These frames [illegible] the tower [illegible] the ship.

The mineral [illegible] upon the wagons in the cliffs, which the trains, which are [illegible] upon [illegible] The [illegible] the wagons [illegible] drawn to place by the [illegible] it automatically opens an outlet in the [illegible] allows the mineral to drop upon the platform in a continuous [illegible] the ore [illegible] the tower [illegible] weight [illegible] the wagons [illegible] the tower by [illegible] to move down the inclined railway and the gate of the [illegible] the tower [illegible] down the incline [illegible] the stern [illegible] the hold [illegible]

As soon as the discharge of the load is completed the empty cars [illegible] the [illegible] and [illegible] the [illegible] the [illegible] the