### A Word About Fertilizers.

It is the estimate of a practical market gardener that if rotted stable manure, whether from horses or cows, can be delivered on the ground at \$3 per ton it is about as valuable for fertilizing purposes as Peruvian guano at \$65 per ton or pure hone, dust at \$40 per ton. But he and that it is really better than these or any other concentrated fertilizer from the fact that it has a mechanical action on the land; that is, it assists, from its light, porous nature, in acrating and pulverizing the soil, while the commercial fertilizers simply enrich without in any way assisting to improve the physical condition of the soil.

But this aeration of the soil is a matter of very great importance. As the use of commercial fertilizers increases in agriculture, the necessity grows, pari passu, of securing proper aeration by turning under sod or growing grain, such as buckwheat every three or four years. The practice of market gardeners near great cities, who, as a rule, are the most thrifty and capable of agriculturalists, is to keep at least a quarter of their land in grain, clover and grass, to be turned under at the proper time, in order to preserve the right mechanical condition of the soil through the decay of vegetable mat-

Such an arrangement is beneficial even when stable manure in sufficient quantity can be obtained; but it is absolutely essential when dependence must be placed largely or exclusively

on commercial manares. For when this is the case, it will be found that these fertilizers will apparently begin to lose their efficacy after awhile. The real difficulty is, however, that after the organic matter derived from grass roots, etc., has become exhausted, or has lost, by decay, its mechanical effect, the soil becomes so compact that air cannot get to the roots of the growing crop, and failure, or partial failure, follows.

## An Interesting Experiment,

The Delaware agricultural experiment station has made some comparative tests of the cream separator and the butter extractor. The extractor goes a step farther than the separator and churns the cream separated by centrifugal force from fresh milk into butter. The results of the trials were in favor of the cream separator and the churn. They secured 93.34 pounds of butter out of every 100 grass is short but fresh and green, and or obtained only 84.60 pounds, and the quality of the sweet-cream butter was not equal to that from ripened cream. As a skimmer the extractor was asuccess. In regard to the merroom rather for encouragement, because it has done so much. Its future development is probably a questtion of the relative merits of "sweetcream butter" and "sour-cream butter."

# Increase of Cattle in Montana.

A favorable report for the cattle industry in Montana is made by the Rocky Mountain Husbandman, which states that from the best information we can gather, the coming season will be one of the greatest the state has ever known in regard to incoming cattle. A great many contracts have steers into Montana during the season, and it is sais to put the incoming —Harper's Bazan

herds at 60,000 head and it may go 80 or 100,000 head.

Last year there were marketed nearly 100,000 Montanagrazed Texas or southern steers, but these did not all come in in one season, but were the accumulations of several years driving. But the great successes of the experiments with southern steers will induce a much larger shipment from the south this year than last. The good grass crop last year and the mild winter will also have their influence upon the drive and shipments northward from the southern breeding grounds and the local breeders of our state may consider themselves fortunate indeed if the capabilities of our ranges are not overdone. As a matter of course our greatest interest lies with the local breeder and we look to his interest first. But we do not oppose the drive, yet we would advise light instead of heavy purchases.

### Poulticing a Horse's Leg.

How to poultice a horse's leg is often a problem, especially when the poultice must be kept at a point high up or arching. I recently had a case from which I learned a lesson. A bag is prepared a little larger than the leg, and with no bottom. Around thelower edge a puckering string is run in to tie around the leg. Next, cords twothirds the length of the bag are made fast to the top of it, and then sewed to thebottom, so the lower third pouches below and outside of the puckering cord. The is held up by gords fastened to old harness, kept on the horse. The poultice is poured in, a bountiful quantity being used. Such a bandage will hold it in place without waste or failure unless the injury itch or pain severely. Then the animal will use its teeth upon it, if allowed to reach it.

## Goslings -- How to Manage Them.

While the geese are setting, they should be thoroughly dusted with dry sulphur once or twice, to cleanse them from vermin. After the twenty-eigth day the eggs should be put in milkwarm water a few moments each day. This softens the shell, and enables one to throw away the rotten, and to count the goslings before they are hatched. Have the nest tight, and keep the goslings in over one night after all are out. Make a triangular pen with three long boards where the pounds in the milk, while the extract- move to a new place every day. A shallow dish of water must be placed so that they can get into it, and be re-filled as often as it gets foul. Feed a little at a time, but often while they its of the machine the chemist of the are small, and at the end of the week station says. "Although the extract-or appeared unfavorably in compar-so they may be turned inison with a much older method, it can to their pasture, if sheltered at not be regarded as a marvel of inventive and mechanical skill. The surprise look drenched, and it begins to droop, is in the first instance that it should it must be carried to the fire and do its work at all, and then even dried. Feed corn meal ground with though it be found wanting, that it cob, mixed into dough rather dry, should do its work so well. It is with an occasional sprinkling of salt. brought at the start into competition | Care must be used to teach them to with a highly perfected machine and a eat regularly. Throw the dough, a method thoroughly understood for morsel at a time, in the midst of a many years of experience. Its short- flock, or the old geese will get the most coming under the severe test to which of it. The goslings soon become tame it is obliged to submit ought not to and will eat about as long as one can be cause of disappointment; there is feed them. At the end of the third week feed them only twice a day, and after the sixth not at all, till ready to fatten them for market. A little poultry food and cream for a chilled gosling is about the only remedy I know of for sick ones, nor do I think they will be often sick if they have good care, and poisonous herbs are kept out of their reach. If goslings are taught to eat, then well fed, and kept dry till well feathered, success is

> Fretty Far Cone. Smithers-How old are you? Miss Randolph-Oh. I don't tell my age any more-as old as I look.

almost certain.

Smithers (with deep issling)-Nell

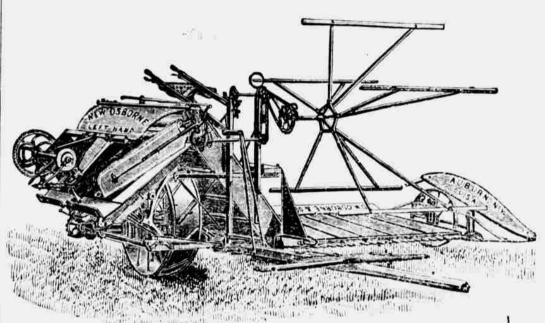
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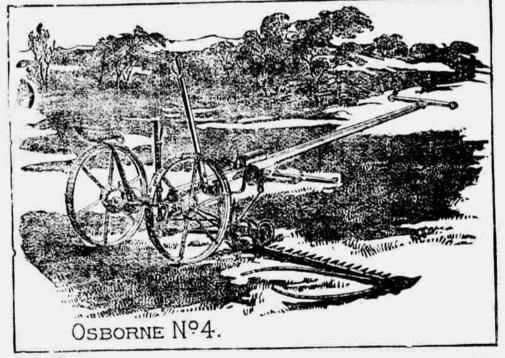
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