

## STILL ANOTHER SWINDLE.

Latest and Best Methods to Make Good Roads.

How to Gather and Keep Winter Apples.

## Useful Hints in Road-Making.

The Alberta Agricultural Experiment Station at Auburn has issued an interesting bulletin on this subject, from which the following extracts are taken: As an unnecessarily long road would increase the cost of construction, the cost of repairs and the cost of time and labor in traveling over it, it should, other things being equal, be perfectly straight, but straightness should always be sacrificed to obtain a level or make the road less steep. This is one of the most important principles to be observed, and yet is most often violated. Roads should be made to curve sometimes for economy in construction, such as to avoid swampy or bad ground, or to avoid large excavations, or to reach points or streams better suited for the approach of bridges. Besides its substantial advantages, the gently curving road is much more pleasing to the traveler, for he is not fatigued by the tedious prospect of a long straight stretch to be traversed, but is met at each curve by a constantly varying view. The proper width for a road depends, of course, upon its importance and the amount of travel upon it. The least width to enable vehicles to pass is assumed at 16 feet. In England the width of turnpikes approaching large towns is 30 feet. Ordinary turnpikes are 35 feet wide, and ordinary carriage roads across the country are given a width of 25 feet. In France the road, varying in width from 66 feet to 26 feet and all have the middle portion ballasted with stone. In New York all public roads are half cut by the commissioners of highways, and are not less than three rods wide between fences, and no more of them need be worked or formed into a surface for traveling than is deemed necessary. The drainage of a road by suitable ditches is one of the most important elements. All attempts at improvement are useless till the water is thoroughly gotten rid of. These ditches are sunk to a depth of three feet below the roadway, so as to thoroughly drain off the water which may pass through the surface of the roadway. In repairing roads the earth used should be as gravelly as possible and free from vegetable earth. Soil or turf, though at first tough, soon decays, and forms the softest mud in wet weather. Stones of considerable size should not be used, as they will not wear uniformly with the rest of the road, and will produce hard bumps and ridges. A gravel road carefully made with good size ditches to thoroughly drain the road, forms an excellent road. Some gravel roads are very poor, caused in a great measure by using dirty gravel which is carelessly thrown on the road in spots, which causes the road to soon wear into deep ruts and ridges.

## Filling Drains.

In a paper read by Thomas M. Hamilton before the Indiana State Agricultural Society, he advised that all the earth should be thrown out to one side when digging a drain, so as to make filling in by horse and scraper a more easy task. If it be the purpose of the farmer to mark the course of the drain by filling in the subsoil last, this plan may be satisfactory, but as a general rule in digging in the subsoil the soil on the surface should be thrown to one side of the drain and the subsoil to the other, so that when refilling the drains the subsoil may be put in first and the black soil on top. Subsoil from the bottom of a drain 30 or 35 inches deep, under the Farmer's Review, will almost invariably poison the surface soil when spread on top of the ground. Our yellow clay subsoils contain poisonous iron, and when sufficiently oxidized by exposure to the oxygen of the air and sunlight ferrous oxide takes the place of ferrous oxide, and is beneficial instead of harmful to the soil. The ferrous oxide may be removed, much more in conjunction with other soil ingredients before surface weathering has rendered it harmless.

We live in mind a field which the farmer apparently raised for crop raising by a deep subsoil plowing, in which he brought the yellow clay to the surface. The crops, though poor before, have been worse since.

## Butter-Making Rules.

The Royal Agricultural Society of England has published some excellent rules for butter making, which are as applicable in this country as elsewhere, and from the list we condense:

1. Rise all dairy utensils in cold water.
2. Scald with hot water and rinse again with cold.
3. Always use a thermometer.
4. Churn the cream at a temperature of 55 to 60 degrees in summer and 60 to 62 degrees in winter.
5. Give the churn good ventilation, and churn at 40 to 45 revolutions to the minute.
6. Stop churning when the butter has formed in pellets the size of small shot.
7. Draw off the buttermilk, and pour pure water into churn until it runs off pure and uncolored.
8. Make a strong brine and pour into the churn through a fine sieve.
9. Remove the butter and work it with the hands or upon the butter worker. Never use the hands. To these may be added the precaution to allow the butter to stand eight or ten hours, then worked carefully to expel the excess of water, and insure solidity, when it is ready for printing or the tub. If these directions are followed strictly in the butter worker, the butter will be of the best quality.
10. Under certain conditions Canadian butter-makers find it necessary to churn at a higher temperature than 62 in cold winter weather. We also think that the second working of butter is quite unnecessary, in fact it may prove a decided injury to the texture of the butter.

## Alfalfa in Dry Weather.

An Illinois correspondent of the Country Gentleman writes: "Through inadvertence I have neglected to report the progress and condition of my alfalfa patch of alfalfa during this exceptionally dry summer. The first crop, as before reported, was taken off the ground May 27, and was estimated to yield two to two and a half tons to the acre of dry hay. In consequence of my absence, the second crop was not harvested till July 27, two weeks later than it should have been, and was considerably less than the first in bulk, the weight of dry forage not exceeding one and a half tons to the acre. The third crop is now fully six inches grown, and appears as indifferent to the drought as the two previous crops have been, yet it would evidently be benefited by warmer nights and higher dry temperatures.

Remark now—common red clover, grown on a lake soil and under almost the same conditions, has made no second growth, and is likely to amount to much, however, the alfalfa may be as blue as bluegrass and timothy meadows, whether the herbage has been taken off or left standing, the whole is as dry and parched as if it would be in a desert. That I shall be able to harvest a third crop of alfalfa this month, or early in September, I have little doubt, but I do not think a fourth one. In 1890 and 1889, will amount to much. Need more be said in favor of alfalfa for the

black soil of Illinois, and especially if more or less severe summer drought is to ruin it, which last year numbered 353. Its policy is to encourage the formation of local societies, and last year there were eleven of these affiliated with the parent body. They are the Middlesex, Norfolk, Kent, Sussex, Oxford, Perth, Hereford, Lancashire, Kent, Western Ontario and Listowel Bee-keepers' Associations. It is remarkable that the organizations are all in the western portion of the Province. This is not because the eastern part of Ontario is unfavorable for honey production or destitute of bee-keepers. "It has just happened to be so," remarks the Rural Canadian, "presumably the dairy interest, while capable of flourishing in most parts of the country, has happened to center itself in the counties of Oxford and Hastings." It did not merely "chance" so if by distant Rural Canadian means mere chance work or luck. Men of intelligent foresight saw that the conditions were favorable, and backing up their convictions with action, industry and enterprise, they have wonderfully developed. Such things don't "just happen."

**Pea Meal Versus Bran.**

Peter Collins, director of the New York Experimental Station at Geneva, writes the Country Gentleman as follows: In your issue of July 25, in reply to the question, "Shall we grow peas for forage?" ex-Governor Hoar is quoted as saying, "By all means; peas are one of the finest butter foods in the world. One pound of pea meal is equal in feeding value to six pounds of wheat bran." I give below the analyses of German and American authorities:

**Pea Meal—Wheat Bran.**

|               | German. | Amer. | German. | Amer. |
|---------------|---------|-------|---------|-------|
| Albuminoids   | 22.4    | 20.7  | 14.0    | 12.72 |
| Carbohydrates | 62.2    | 60.7  | 60.3    | 60.3  |
| Crude fibre   | 0.2     | 0.6   | 17.3    | 6.33  |
| Fat           | 1.3     | 1.43  | 0.6     | 0.68  |

From the above analyses it will be seen that both pea meal and wheat bran, as is pretty generally known, are valuable foods, and from the analyses also it would be difficult to determine which of the two was most valuable, but I think none would be disposed to agree with the above statement credited to ex-Governor Hoar.

## Milk—Three Times Daily.

Cows that are large milkers and fresh in milk when turned to pasture should be milked three times a day instead of twice. They are hearty feeders and have plenty of food in the milk, and when milked three times a day they produce more milk, and developed almost with the one object of turning fodder into milk, their production is limited when they can hold no more. Contrary to a common opinion, by so doing the milk contains more fat, and of better quality, as well as increased in quantity. When anything greatly disturbs the cow the percentage of fat in her milk is lessened, even to a greater extent than the milk flow. This has been proved by repeated tests, when they have been worried by dogs, abused by ill-tempered milkers, or in any way frightened or excited. Perhaps the fever in the blood burns out the fat, or the milk is absorbed into the system. But whatever the reason the fact is abundantly proven, and as over-distension of the well-filled milk-veins and glands cannot help but cause pain, this will explain why the milk is richer in solids, and especially in butter fats, than when it is drawn but twice. (Coleman's Rural World.)

## Still Another Swindle.

A swindle is being carried out upon farmers of Hancock and adjacent counties of Iowa. A couple of men acting as agents for a Brooklyn, N. Y., insurance company go to the county records and ascertain the list of mortgages, and then sufficiently oxidized by exposure to the oxygen of the air and sunlight ferrous oxide takes the place of ferrous oxide, and is beneficial instead of harmful to the soil. The ferrous oxide may be removed, much more in conjunction with other soil ingredients before surface weathering has rendered it harmless.

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## PATRONS OF INDUSTRY.

President of the National Farmers' Alliance and Industrial Union.



Col. L. L. Polk, the president of the Farmers' Alliance in the States, is a Southerner. He is the owner and editor of the Progressive Farmer, of Raleigh, N.C., which place is also supposed to be his home. His duties, however, do not give him much opportunity to write for it, so constant and pressing are the demands upon his time. Col. Polk was born 36 years ago, and since early manhood has been aggressive and progressive. How popular he is in his order may be seen from the fact that out of the vast numbers of the members of the Farmers' Alliance has been chosen president. He now makes his headquarters at Washington, D. C., and the amount of business he disposes of in a short time is immense.

Col. Polk believes that the Farmers' Alliance movement will become an organized political party. His latest utterances on the subject were in Richmond, Va., where he was attending the meeting of the State Alliance. He said that the National Alliance has over 3,000,000 members and is growing rapidly. It is strongest in the Southern and Northwestern States, and is increasing at a rapid rate in California, Oregon, Washington and other extreme Western States. President Polk is a powerful speaker, and is a man who, by his direct manner, would attract attention anywhere. His appearance suggests the possibility of a great future. He is traveling a great deal for campaign purposes. Every day of his time until the end of October will be employed in meeting official engagements.

## The Patrons of the County of Bruce intend holding a demonstration in Paisley on Sept. 10, when prominent speakers from a distance will be present.

The people of the Patrons of Industry, recently held in Daniel Scott's grove, Kintyre, proved to be a grand success. Speeches were delivered by the following gentlemen: Messrs. Farrow, Stalker, Kirkpatrick, McGowan, and others, all of which were excellent. Music was furnished by the Wardville brass band, and the McGregor string band, and the Highland pipers. The day being favorable the crowd was very large.

## The Patrons of school section No. 14, Charlotteville, a flourishing association with a membership of 50, held a successful black-berry festival recently. About 250 people took of berries and ice cream, after which Miss Anna Beely was elected to the chair, and made a very appropriate speech which was heartily applauded. The president, Abraham Neilson, made a few remarks, and the county secretary, Albert Swinn, made an interesting speech for the benefit of the order, followed by J. L. Earls and Hiram Scott of Kintyre, and a committee from the Farmers' Alliance are getting ready to visit Indianapolis to ask the State Board of Tax Commissioners to raise the figure. A large section of the Alliance want the horse taxed at \$10.00, the amount paid for him, claiming that farm land is assessed for its full value, while others will be content with a raise to \$75.00. The Alliance leaders aver that they can prove that the stallion is earning an enormous dividend yearly, and that last year alone the profits were nearly \$50.00. It is understood that J. J. Jams, one of the owners of the horse, has made a loan to move Axel's horse from Vigo county in case the assessment is made, and this fact, the Alliance alleges, deters the local board from making a proper assessment, which fact outrages the farmers. The Alliance is on the war-path over the Axel matter, and there promises to be lively times before the State Board when the Vigo committee calls. Canadian farmers will make a note of the aggressiveness of their United States brethren.

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W. B. Utsey, St. George's, S. C., writes: I have used your August Flower for Dyspepsia and find it an excellent remedy.

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