

# Soils and Crops

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## Sheep on the Dairy Farm.

It is generally admitted by experienced flockmasters that the majority of dairy farms present ideal conditions for handling and supporting a small, but select, flock of sheep. The methods of crop growing and caring for the dairy herd furnish proper feed for the flock and, if properly housed, the feeding can be done at regular periods with practically no loss of time or labor. On many dairy farms a rigid culling of the cows, and a small band of ewes in the place of the low producers, would not only add to the profits from the business, but would add materially in balancing the labor problem.

There are certain limiting factors in dairying, the same as in sheep raising, which for the most part make it unprofitable to extend either, or both, beyond certain limits. These limits are stable room, labor, and grain feeds for the dairy herd; pasture land, parasite infection, woven wire fencing and waste feeds for the sheep.

Dairy cows require a vast amount of labor and considerable grain feeds. Sheep make good returns with the least amount of labor and have the ability to make profitable use of rough feeds with small quantities of grain. Dairy cows require expensive barns and sanitary equipment to be a product adapted to the trade. Sheep thrive remarkably well in open sheds, and it is to them that we can turn for the most profitable marketing of the surplus feeders and silage. For the one hundred and fifty-acre dairy farm, forty ewes make a most average flock to carry from year to year. A few less cows and more sheep could be made profitable on thousands of our Ontario dairy farms.

The selection of the breed is of small importance compared with the other problems of handling the flock. At the present time the flock that will furnish a few good lambs and yield profitable fleeces of wool will give the most profit. If some particular breed is the most popular in the community, for many reasons it would be advantageous to select ewes of that breed for foundation stock. One might just as well suit his fancy in the matter of breed right at the start because he can do it cheaper then than he can shift over a few years later. When prices are right, or when he can make a good deal in picking up a few uniform, or thrifty, well grown ewes, he should not hesitate to make the start. The main object is to get ewes of as uniform a type and size as possible so that better advantages of marketing

can be obtained when a mixed flock is kept.

The first step toward fitting the farm for sheep raising will be to inclose some of the fields with sheep-tight fences so that the ewes will have abundant range to gather an adequate supply of feed. As soon as practicable, fences should be provided so that the ewes and lambs can clean out the fence rows, glean the stubble fields and convert the aftermath of the meadows into profitable wool and mutton. Farms that support sheep are remarkably free from weeds. Sheep not only clean up the fields and fence rows, but, if allowed to range over the pastures grazed by dairy cows, they will clean up the undesirable weeds and grasses in a way that could not be equaled with other kinds of stock. Some of the most foul pastures have been greatly improved by allowing sheep to graze alongside of the cattle at frequent intervals during the grazing season.

The kinds of hay, grain and fodder crops grown on the dairy farm provide an excellent ration for the sheep. A small field of rape for fall grazing will give the ewes and lambs that are to be fitted for market a good start and prepare the breeding ewes for the mating period. As far as possible it is advisable to allow the sheep to harvest their own feeds.

The feeding of a small amount of silage has solved the difficult problem of bringing the pregnant ewes through the winter feeding period without the use of roots. Silos are an essential part of the equipment of all well-managed dairy farms. This is also another reason why the dairy farmer can produce wool and mutton at a profit.

With good dairy buildings it is an easy matter to provide open sheds for the sheep, and in case of severe weather during the lambing period space can be provided in the dairy barn for a few of the ewes to drop their lambs. Of course, such an arrangement means a lot of extra work for a few days at lambing time, but few of us can get along so as to avoid some of these little troubles in handling our cows and other farm stock. In fact, if sheep are kept keeping on our farms they are worth this small amount of trouble for a few days during the lambing season. The main problem is to regulate the lambing season so that the farm and plan the mating season so as to minimize these troubles during the lambing period. A small flock of well-bred sheep on the dairy farm can be made to pay fine profits, while a large flock may prove a losing proposition.

## Poultry

Clean eggs only should be selected for putting down in water glass. Never wash them, as this removes some of their natural protective covering. Perfectly fresh eggs often get a "black eye" on the market just because they are not clean.

A fat chicken is always desirable and full plump body and limbs will go a long way toward finding a customer. Most of the chickens sent to market are lean and lanky. Hens know more about bringing up chicks in five minutes than we do in six weeks. Lots of folks worry so much over their chicks that they do not leave anything worth while for the old hen to do.

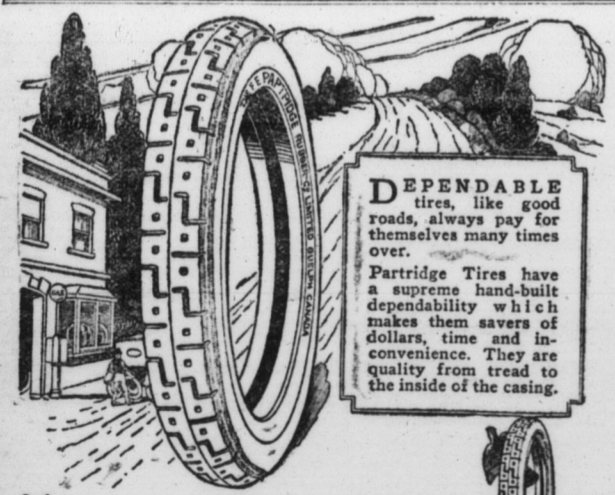
Eggs kept more than two or three days should be turned daily, as the yolk may gravitate to the lining membrane and adhere to it. As the shells are porous, do not let the eggs be exposed to steam or strong odors. Neighbor's chickens may get the

notion of coming over the fence to pick up garden stuff. Do not get all sweaty about it, and throw stones, and threaten to sue the folks across the line. They do not want their chickens to do that. Just speak to your neighbors in a kindly way about it. Smile a little bit and say: "I think you will be glad to know about it." Then smile some more and let it soak in. That generally puts a stop to it.

### "So Near and Yet—"

On a summer day when it's scorching hot  
And I'm out in the sizzling field;  
And the sun beats down from a cloudless sky  
Like a red-hot copper shield;  
When I'm wringing wet with a scalding sweat,  
'Tis then that I think all day  
Of that swimming pool, so nice and cool,  
Just seven miles away!

Drain the wet field that has been causing trouble and poor yields.



**PARTRIDGE TIRES**  
Game as Their Name

## Sheep Notes

Prevention of bloat is, of course, of prime importance. Bloat commonly is caused by suddenly turning hungry, empty sheep into a field of wet, rank, green clover or alfalfa. Rape in the same condition also will cause fatal bloat.

Any sudden change of feed is dangerous. All changes should be made gradually, and sheep never should be turned into a wet crop for the first time. They may graze wet clover or alfalfa with comparative immunity if they have been on such pasture right along; but the damage comes from sudden use of wet feed.

Giving free access to a mixture of two parts of salt and one of slaked lime tends to prevent bloat, and it is well to allow this mixture when cases have been experienced. The sugar in red or crimson clover is supposed to be the cause of bloat, but alfalfa in full bloom is not considered dangerous.

When a sheep bloats the treatment for the trouble is similar to that for bloat in cattle. If life is in great danger, indicated by the sheep gasping for air and staggering or going down, "trap" the paunch at once to liberate the gas. This is done high up in the left flank at the most distended place. Clip off a patch of wool. Cleanse and disinfect the skin, unless in cases where instant tapping is necessary. Cut a little slit from above downward with a sharp, small knife-blade. The point for incision is close to the rib, just under the transverse processes of the spine and well forward of the point of the hip.

Insert the point of the small trocar and cauterize, then drive both instruments inward, downward and forward, taking care not to go in a direction where the kidneys may be injured. Now withdraw the trocar (dagger) and leave the canula (tube or sheath) in place until the gas has escaped; then return the trocar to the canula and pull out both together. Afterward

apply a little iodoform powder, or pine tar.

Medicinal treatment consists in giving a pint of new, warm milk. If the case is not severe and the dose may be repeated in half an hour, if that is seen to be necessary. In more severe cases add a tablespoon of turpentine or aromatic spirits of ammonia, for milk makes a capital medium in which to give these drugs.

Formaldehyde is the latest and one of the very best drugs for bloat. Give from one to two teaspoonfuls in a pint of milk or half a pint of oil well shaken together.

If these remedies are not at hand, give two ounces of bicarbonate of soda or one of hyposulphite of soda in water, and add one or two teaspoonfuls each of essence of Jamaica ginger and peppermint. Rectal injections of soapy warm water and glycerine also prove beneficial.

### Conserve Plant Energy.

Most perennials begin gathering strength for next season as soon as they have fruited and it is then that they need fertilizer to build up the material for new tissues. Currants, gooseberries and other shrubs should be manured as soon as the fruit has been harvested. See to it that the plant does not waste its precious energy in producing something which you do not want. If it is flowers or fruit which you are after, cut out the inside limbs of the plant which absorb energy for their growth but never get enough light to produce flowers or fruit. If it is flowers alone that you desire, cut off the flowers as fast as they form. Do not let the plant waste its strength in maturing fruit and seed which you do not want. Sweet peas and pansies, for example, can be picked clean every day.

This same principle lies at the bottom of all pruning work. Make your plants use such strength as they have in doing the things which you want them to do.

Keep the pigs growing every minute.

## The Co-Operative Threshing Outfit

In many farming communities, more particularly in some of the older agricultural regions, where small grain crops are grown as a complement to dairying, stock raising and other types of farming, the small threshing outfit is gaining in popular favor. The demand for small separators, which may be moved easily from farm to farm, set in place quickly and furnished with power from a farm tractor, is increasing rapidly, and the season of 1920 promises a still greater demand for these machines.

The farmer has been relatively slow to figure the investment in farm machinery from an economic standpoint, but since labor charges and the cost of operating highly specialized machinery have reached such high levels, he is beginning to discover that some of the modern mechanical inventions, as well as many of his old methods of doing work by hand, do not fit in well with present prices and labor conditions. Time compels constant changes in all things, and threshing is no exception.

On farms where a large acreage of grain is seeded and plenty of help is available, the threshing outfit with a large capacity will thresh at a much less cost per bushel than the smaller rigs. If, however, the acreage of grain is small and help is scarce, the conditions are reversed. Large separators with plenty of power are not likely to be overcrowded; and the waste of grain is less than is the case when the threshing is done with a smaller machine and a large crew. When grain is a little damp, or if wet bundles are found in the stack, the large machine handles them with less danger than the smaller separator. Many farmers who lack convenient power for seeding extra help prefer to pay more money and have their work done as quickly as possible; consequently they prefer to use the larger outfit and shorten the stay of the threshing crew as much as possible.

### Advantages of Small Outfit.

During the past few seasons the threshermen who have carried a full crew for large rigs have found it necessary to raise prices to a figure so high that many farmers have figured it more profitable to get together and buy an outfit of their own. In most cases some one of the group has owned a tractor capable of furnishing belt power for a small separator; and for that reason a small machine has been purchased. This has made it possible for them to partially overcome the shortage of help and to get their grain threshed at the proper time. As the demand for help is most acute at the season when the commercial threshermen are busiest the owners of these small outfits can plan their work so that it will conflict as little as possible with the other activities of the farm. Another advantage of the small outfit is the fact that the work may be done without interfering with the regular chores of the farm. When much live stock is kept it is practically out of the question to get to his neighbor's farm early enough in the morning to take his place in the crew needed to operate the commercial rig that is threshing by the bushel and running the full ten hours. Likewise, his horses are sure to suffer from neglect if he is forced to stay late enough in the evening to put in the full ten hours. This has made it necessary for operators of large machines to raise their prices per bushel in proportion

to the troubles they have had in running full time to full capacity.

With a large custom outfit the owner cannot afford to run short days, but must run early and late, oftentimes threshing when the grain is hardly in condition to thresh. With a small machine and tractor owned by several neighbors this situation is avoided, as they can do their chores as early as convenient in the morning and get the farm work started by the time the grain is in fit condition to thresh. In the evening they can quit early enough to do the chores without interfering with anyone.

### Loss Through Delay.

In many localities where farmers depend upon one custom outfit there are many who have had disheartening experiences in failing to secure a rig at a time when it was needed, and as a result have lost considerable grain. Doing work by hand is a factor that has contributed to the popularity of the small machine is the fact that the owners do not have to delay threshing when the grain is ready to thresh. In many instances this means a decided saving of grain; besides the owner can plan the storing of his grain and straw so that there will be an immense saving of labor in feeding his stock and getting his other crops under cover. If a large custom rig is depended upon to do the work he must wait his turn, though his grain may be ready weeks before the machine could get to his farm; and in bad weather much good grain might be lost; whereas, if he had an interest in a smaller outfit, he could thresh as soon as the grain was fit, then if bad weather came he would not be compelled to neglect his farm work to help those with whom he changed work. This condition is more common where farms are small and where more of the land is devoted to pasture and cultivated crops. In such localities the jobs are smaller and the larger machines must do the work at a decided disadvantage.

All arguments, however, are not in favor of the small separator. In many cases it is operated by a man who has little knowledge of machinery; consequently there is likely to be considerable breakage. Another factor which should be considered is that the cost per bushel is comparatively high when the machine is used only a few days in the year. However, if it is securely housed, and operated by a man who has had some experience with machinery, these factors are not sufficient to discourage its purchase and use. Interest, depreciation and cost of shelter are always a fixed cost, and when they are distributed on the bushel basis, the fewer bushels of grain threshed each year, the greater will be the fixed charges per bushel. It is always necessary for one to decide whether or not the advantages to be gained from its use will be sufficient to offset the waste of grain and the higher cost of custom threshing.

### Factors in Success.

An important factor in the smooth and successful operation of a threshing rig is to have the work done on a business basis. To have the average day's work consist of so many bushels of wheat or oats. To keep a record of the time put in by each member or laborer and to have the costs of the work properly distributed among the members so that each one shall be charged on the basis of the amount of service performed on his farm.

## Welfare of the Home

### Meals for Children Under Six.

These meals for the pre-school child are suggested for normal children, who are not under a doctor's care. Although they are not intended to be taken as law and gospel, they have been worked out carefully and should serve as a valuable guide to the young mother.

If a child who is regularly and properly fed has a poor appetite, there is very possibly something wrong with it. Children often cultivate a finicky appetite, however, especially if they are encouraged to be "choosy" about their food. There are very few things which a child really dislikes and the mother will easily herself no end of trouble if she insists from the beginning that he eats whatever he is given, so long as it is well cooked, properly seasoned, and wholesome. If he already has the habit of refusing certain foods which are good for him, the simplest way to break him of it is to let him get hungry enough so that any of them will taste good to him.

### From 18 Months to 2 Years.

Breakfast, seven a.m.—Fruit, as juice of one orange; pulp of six to eight stewed prunes; pineapple juice two or three tablespoonfuls, with milk.

Bread, 24 hours old, toast or zwieback, with butter.

Milk, one cup, warm or cold.

Lunch, eleven a.m.—Glass of milk, with bread 24 hours old, toast or zwieback and butter.

Dinner, two p.m.—Broth, thickened with peas, sage, rice, or barley; or vegetable soup and milk; or beef juice, with bread crumbs; or soft-cooked eggs, or poached eggs, with toast.

Vegetables, selected from baked or mashed potatoes, squash, cooked celery, mashed turnips, or carrots.

Bread, 24 hours old, white, or whole wheat, or graham, with butter.

Apple sauce, or prune pulp, one tablespoonful.

Supper, six p.m.—Macaroni, boiled

rice, custard, or junket, one tablespoonful.

Bread, 24 hours old, or toast with butter, two slices.

Milk.

Baked apple, apple sauce, or stewed prunes.

### From 2 to 3 Years.

Breakfast, seven a.m.—Fruit, as half an orange, six or eight stewed prunes, pear or peach pulp.

Cereal, three or four tablespoonfuls with milk; or egg, soft-cooked or poached.

Bread, white, or whole wheat, or graham or toast, with butter.

Milk, one cup, warm or cold.

Lunch, eleven a.m.—Glass of milk, with bread and butter, or graham or oatmeal crackers.

Dinner, two p.m.—Broth or soup.

Meat, as, fine cut beef, lamb, or chicken; or fish boiled.

Vegetables selected from potatoes, fresh peas, fresh beans, spinach, asparagus tips, cooked celery, squash, mashed turnips, or carrots.

Bread and butter.

Junket, or custard, or blancmange.

Supper, six p.m.—A cereal or egg (if not taken for breakfast); or custard; or milk toast, or macaroni.

Bread and butter.

Stewed fruit.

### From 3 to 6 Years.

Breakfast, seven a.m.—Fruit, as oranges, apples, pears or peaches.

Cereal.

Egg, soft-cooked, poached or scrambled.

Bread or toast and butter.

Milk or cocoa.

Dinner, twelve noon.—Broth or soup.

Meat, as, beef, lamb, mutton, or chicken; or fish, boiled.

Vegetables, except corn, cabbage, cucumbers or egg plant.

Bread and butter.

Simple puddings or custard.

Supper, six p.m.—Rice, or macaroni, or soup, or cereal, or milk toast, or thick soup, or corn bread.

Fruit, or custard, or junket.

Milk, warm or cold, or cocoa.

### Name Your Farm.

Every farm should be named. The matter of picking the name is something that bothers a good many. I know one neighbor who was looking for a name until he moved off the farm, but he never could decide on anything suitable.

I had that job two years ago. The farm was situated on a little jog in the macadamized road that runs by our house. The jog is probably 400 feet. Finally that occurred to me as the fitting name—The Jog Farm—and as I am working around the place in touring time I hear the remark so often, "Well, that farm is named right, isn't it?" The name "Jog" also suggests the very opposite of laziness, as a real farmer to-day must eternally be on the jog.

Another thing—this farm name is distinctive. There is no other farm named this so far as I know. There are dozens of Shady Oaks, River Views, and so on; but when one sees this name he will remember it. So far, I am not able to realize on this name, but the time will soon come when I can. The stock and produce we have to sell will come to be known by the farm name as much as by my own appendage. Folks who go by see the chickens or stock, and remember where it is by the peculiar crook in the road, and the farm so named. Already I get two or three letters a month addressed to the farm name alone.

Select a name that is different. Make it mean something peculiar to your farm. You can do it. It may take a few months to locate it, but it is there.—Earl Rogers.

### Garden Hints.

Start geraniums during August for winter blooming.

Strawberries, if started in August, may produce a small crop the following spring.

Seeds of larkspur, pansy, columbine and hardy chrysanthemum may be planted out-of-doors in August. This will save a year of waiting for them to bloom. Most of these, and other perennials, will bloom next year.

For cabbage-worms: Mix one part of Persian insect powder with four parts of air-slaked lime and dust it on the plants.

Weevils can be killed in beans and peas by the use of carbon bisulphide. To treat these put them in a jar, tub or other vessel which can be covered tightly. Put into a glass about one teaspoonful of carbon bisulphide for each ten gallons of space in the enclosure and place the glass in with the beans. Allow them to remain in the fumes of the carbon bisulphide overnight, then take them out and place in dry storage quarters. Do not take lamps or lighted matches near the material, and do not breathe the fumes.

Use a good spray to protect the cows from the flies.

Thistles cut in August will not grow again.

Feed extra forage or grain if the pasture grows short or dry.

Thin the fruit on the apple trees. Pick off every little, imperfect apple. This takes grit, but it pays.

## Financial Notes

Halifax—Twenty-five million feet of lumber, in round figures, bought by British interests, is stored at various points along the railway lines of the Province, awaiting shipment to England.

Victoria—The official report for last year of the Minister of Mines shows a production of \$38,296,313, as compared with \$41,782,474 in the previous year. Coal last year was valued at \$11,337,000.

Allenby, B.C.—The Canada Copper Corporation is stated to have spent in the neighborhood of \$4,000,000 in preparation for carrying on extensive mining and milling operations at Copper Mountain. Some \$2,600,000 has been spent in prospecting, developing, construction and equipment work at the Copper Mountain mines and a very large sum in building the concentrator. The latter is located four miles south of Princeton on the Copper Mountain branch of the Kettle Valley Railway; and as at present erected will mill 2,000 tons per day. It is expected to reach 3,000 tons per day before the end of the present year and later will be increased to 5,000 tons daily. The concentrator is 320 feet long by 207 feet wide and is equipped with most modern machinery.

Active work at Allenby began in the Spring of 1918. Roads have to be constructed; houses and mill buildings had to be erected. A large pumping plant was built and other mill buildings promptly installed with the most modern machinery. Some \$1,800,000 was spent alone at Allenby and large sums elsewhere.

Copper Mountain contains large lenses of low grade ore, averaging 1.74 per cent. copper. To date 10,000,000 tons of ore has been proven and 2,000,000 tons semi-developed. All of the proven and semi-developed tonnage is situated higher than the lowest tunnel level, which means that all of the ore will be run by gravity instead of being hoisted out of the mine, nor will any water have to be pumped out of the mine.

The most modern machinery and equipment is expected to result in big profits for the Canada Copper Company at Copper Cliff and Allenby.

### Labor Economies You Can Practice.

One man with a 28-inch horse-drawn plow can accomplish 70 to 80 per cent. more work than with a single-bottom plow.

One with a 28-inch plow drawn by a tractor can cover 80 to 35 per cent. more ground in a day than with six horses on a horse-drawn plow of the same size.

A corn binder is 50 per cent. more efficient than man labor. A hay loader increases efficiency 25 per cent. compared to man power.

Place a dish of charcoal where your hens can reach it at all times. It will prevent disease by absorbing poisonous gases and juices.

## FUN FOR RAINY DAYS

"I just dread a rainy day when the children are home from school," sighed a mother of two children. "The children are so noisy and restless. I don't see how you ever manage with four! Two nearly set me crazy!"

"It doesn't bother me a bit," answered her friend. "In fact, my children always look forward to a rainy day, for they know there will be some special plans in the form of a surprise."

"Do you mean to say you buy a new game for every rainy day? I simply couldn't afford that!"

"No," answered the other mother. "But I have a little book in which I jot down suggestions for games and fun. Sometimes I get these out of newspapers and magazines, sometimes I hear of them from friends and sometimes I just make them up."

"Do tell me some of them," exclaimed her friend, "so I can keep them in reserve for the next time a rainy day comes along."

"My best games," she began, "are made by using old magazines. Some-times I give the children each a magazine containing numerous advertisements and tell them to cut out all the pictures of foods that would be sold at a grocery store. These must be neatly and carefully cut. When they are all finished I inspect and see who has the largest number. After the contest is over, the children usually play store."

"At another time, if I have more magazines, I give each child a piece of paper to make a 'life.' To do this they must cut out characters of the same sex of every age from infancy to old age. Again I inspect to see who has beaten. The girls usually end up by playing paper dolls, and as it just happens that my boys like to read, they are likely to find a story in their magazine that interests them."

**Puzzles from Picture Cards.**

"Some days I cut up picture postcards that the children have never seen and let them put them together as puzzles. And I have another set of postcards of public buildings, whose names I have cut off, which I give to the children to guess and to write down their guesses."

"Speaking of writing down names, reminds me of the scores of games for pencil and paper. One of the most popular of these with my children is word-building. I give out a word such as 'beautiful,' and each child writes as many words as he can think of, using the letters. Another favorite is mixed words. I take about twenty words and mix the letters. Whoever finds the right words first, beats. Still another game which requires less preparation is a game which I have never seen in any book, but which my children love—they call it 'hanging.' One takes a word and writes the first and last letter, with dashes in between to represent the unwritten letters; thus: r \_ \_ \_ n. The opponent guesses letters; if correct the other player puts them into the blanks; if incorrect he starts to hang his opponent by drawing his head on a gallows. For each incorrect letter, parts of the body—such as trunk, hands, feet, etc., are added—and if the person is completely 'hanged' before he guesses the word, he must try over again with another word. My children get a great deal of fun out of drawing their opponents."

**Flags of All Nations.**

"If your children have crayons or paints, there are many amusing things they can do. A favorite pastime with my children is drawing all the flags in the dictionary and writing names of the countries they represent underneath, then they turn this paper over to me and I give them the list of countries to see how many they can draw from memory. We have a bird book and a flower book and they do the same thing with these."

"My older children like to make flowers out of tissue paper and wire. I keep a supply of these on hand. When they do this, I usually give the younger children paper dolls from magazines to cut out and play with. 'I think that the play that they all four love best—which I save to use only very occasionally—is a 'hunt' of some sort. This requires more preparation. I assign the children some sort of occupation in the kitchen or dining room—such as doing dishes—and shut off those rooms. Then I hide peanuts or little hard candies all over the rest of the house in the most obscure places. The hunt often takes all afternoon, for I count the number of objects I hide and the children make it a point of honor to find every one. The prize is usually the right to choose Sunday's dessert."

"The nicest part about entertaining children is that they always enjoy themselves. And it's as much fun for me as for them," she concluded as her friend hurried off to make note of her suggestions.

**Provide screens for all house windows and doors and see that they are kept in good condition.**

On a good many farms there are old barns or other buildings that are empty. On those same farms, high-priced machinery may be standing out. By tearing down these out-of-date buildings, moving them to the right place and rebuilding them according to the needs of the place, we have protection for all the binders, plows, mowers and so on. Make money-savers of these old barns.