THE FARM.

Farm Fences Attacked.

Editor "The Farmer's Advocate":

Might I suggest that you open your columns to the consideration of another problem, viz., "Fencing." The "Bank Barn," "Licensing Stallions," "Width of Sleigh Runners," etc., are all of prime importance, but the fence question opens up one of the most serious considerations with which farmers have to do. Not only have they cost this country many millions of money, but their upkeep is a constant drain on our means and time. In starting this discussion, I submit that the great bulk of our fences are entirely unnecessary, and also that the farming community have a grievance against our legislators in that the laws dealing with fences leave room for a good deal of uncertainty and consequent litigation. For instance, is it correct that we are not obliged by law to fence our property along the highway line? Is it the case that every one is under legal obligation to keep his animals on his own premises, and that the obligation is not on the other fellow to keep them out?

I have a distinct recollection of hearing a prominent judge decide that owners of animals trespassing were liable for damages, whether the injured person had his property fenced from the highway or not. If this is good law, and a proper interpretation of the Statutes, then our legislators are to blame in that they have not made the wording of the law plain and clear, and I fancy if it were common knowledge that all this costly roadside fencing was not obligatory a vast deal of money would have been saved. Do you not think, sir, that if the judge's decision, as given above, is right, and that everybody was fully seized of it, that we would long ago have found a solution of how to avoid building roadside fences?

Possibly I have gone far enough at present to open up the discussion, but let me suggest that if the farmers of any part of Ontario have adopted the no-fence plan, they be invited to tell us how they manage it, and how they are satisfied with the change.

WM. PRATT.

Simcoe Co., Ont.

Ans.—Your statements of law are substantially correct. There are special statutory provisions for the unorganized districts of Ontario, but, as affecting the rest of the Province, we would answer your legal questions in the affirmative. The subject is one of growing importance. Let us hear from others.

Cement Walls for Barn.

Editor "The Farmer's Advocate":

Having read some of the articles on the above subject lately, I feel it my duty to write my experience, it being quite contrary to that of the gentleman whose hens died in his basement. We built a barn in 1905, 32 by 97, using cement for wall. I think it is the cheapest material for the farmer to use, as he can do the work with unskilled labor. The ceiling inside is about 9 feet high. We have two ventilators running to the roof, made of 8-inch stuff, and have 3-inch tiles put in about two feet from floor for ventilation. We have 16 head of cattle, but have had 18; 6 horses, 33 pigs and a few hens. I have not noticed dampness to anything like the extent that others have spoken of. Everything seems quite comfortable.

F. G. SANDY.

Victoria and Haliburton Counties.

Paper Under Metal Roofing.

In the report of our barn-inspection tour (issue January 17th) mention was made of one barn covered with metal roofing, which was found tight and satisfactory in all respects, except that moisture rising from the stable condenses under it very readily. This promptly caught the alert eye of an enterprising firm which manufactures metal roofing. They immediately wrote us for further information, which was supplied, and acknowledged with a letter, in part, as follows:

"We always recommend the use of ventilators, and also the use of paper under metallic roofing, as it makes the building much more satisfactory in every way, although, of course, it is not necessary to use ventilators unless live stock are kept in the building, in which case it is always desirable to have a proper system of ventilation."

For Leaking Cement Tank.

Editor "The Farmer's Advocate":

In reply to "Reader," in reference to a coating to prevent water escaping through his cement tank, I would suggest a thin mortar, made of 1 part lime to 4 parts cement, and put on with a plastering trowel. Put a thin coat on bottom and sides. The lime forms a coat which is impervious to water. I had the same trouble with a cement cistern until I applied the above.

Kingston, Ont. JAS. STONEHOUSE.

Building a Rural Telephone Line.

Editor "The Farmer's Advocate":

Answering your enquiry as to the best way to build a rural telephone line and the approximate cost of same, would say the most essential element to first-class telephone service is good outside construction. Poor construction is always dear. Not alone will it prove a source of annoyance and loss of service, but at the same time the entire work will have to be gone over a second time, adding doubly to the cost, unless first-class work is done. It might be added that poor construction is worse than no line at all, for when it is expected that the line may be depended upon, just when they are most needed they are down.

There are two kinds of telephone lines suitable to rural requirements, viz., metallic circuit, and grounded, bridging telephone lines.

A grounded line (Fig. 2) consists in running one wire on the poles and using the earth for the return path of the current. Grounded lines prove quite satisfactory, providing good ground connections are obtained, where there are no trolley wires, electric-light circuits or telegraph wires running very close to the line.

The metallic circuit (Fig. 3) consists in running two wires on the same set of poles, one for the outgoing current and one for the return current. Metallic circuits are always preferable to grounded lines, as the service is always superior, being free from noise caused by earth currents, and the liability of damage to apparatus by lightning is much less.

Where several metallic currents are run on the same set of poles, they should be transposed; that is, the wires of each circuit should be crossed

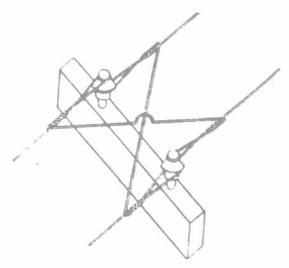

Fig. 1.

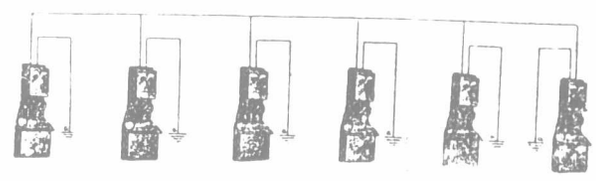

Fig. 2.—Bridging grounded circuit.

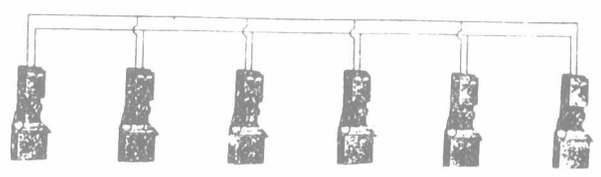

Fig. 3.—Bridging metallic circuit.

and recrossed, as shown in Fig. 1, which is done to prevent cross-talk between the different circuits. The most common practice is to transpose lines every half mile, though no definite rule can be given for this crossing and recrossing.

Poles.—For rural lines, poles should be at least 25 feet long, 5 or 6 inches in diameter at top; cedar is the best timber. They will cost from $1.25 to $1.60 per pole, f.o.b. the receiving station of shipment, in carload lots of about 130 to the carload; i.e., at consumer's station.

Staking.—The first thing to do is to stake out the line. This should be done with care, so as to get the poles in perfect alignment. If the line is crooked, every pole will have to be guyed in order to keep the wires from pulling it over. The guying of a line is what makes it expensive to build. In consequence, the straighter the line can be staked out, the better for economy's sake. Stakes should be set from ten to eleven rods apart, or closer in going over hills or where the ground is uneven.

Poles.—Poles should be set one-seventh of their length in the ground, and the earth well tamped in. Use short poles in going over hills and long poles in the valleys, so that the top of the line will be as level as possible.

Railroads.—In crossing railroads, the telephone company must make application to the Board of Railway Commissioners for Canada, sending to the Secretary of the Board with the application a plan and profile in duplicate. Profile must show the distance between the Railroad and Telephone wires, which must be at least three feet apart. Wires of telephone company should be at least 25 feet above tracks, and firmly secured to double cross-arms.

Guying.—Before stringing in wires, all poles not in perfect alignment should be thoroughly guyed. All corners should be extra well guyed. Do not guy to fences or trees, as they are not permanent, and the swaying of the trees will break the wire. Where guying is necessary, set a strong post in the ground, or bury a "dead man." This latter consists of a log or large stone buried fully five feet deep, to which the guy is attached.

Corners.—Heavy poles should be selected for corners, being able to stand the strain better than others.

Wire.—No. 12 B. B. galvanized-iron telephone wire is the proper kind to use. Costs about $3.30 per cwt., delivered. Requires about 165 pounds of wire to the mile, or 330 pounds for one mile metallic circuit.

Stringing Wires.—In putting up two or more wires, be careful to draw them all to about the same tension, the rule being from 12 to 15 inches sag in a 10-rod span. This is equally true whether the line is held on brackets or cross-arms. Use side blocks and glass insulators.

Insulation.—The insulation of the telephone line means its insulation from anything that would tend to conduct the electricity direct to the earth instead of passing through the telephones in such proportionate quantities as it should. Telephone lines must not be allowed to touch or come in contact with tree-tops, for the trees and leaves would tend to ground the lines and interfere with the service.

Telephones.—It is always best to purchase Bridging telephones, with the ringer wound to 1,600 ohms resistance, a 5-bar generator, and where a metallic circuit is used and a switchboard required have a push-button installed in the instrument so that the subscriber can call central without any other subscriber knowing that the ring has gone through. With these telephones in use, as many as twenty, or even thirty, can be successfully used on one Bridging Party Line. These telephones will cost from $14 to $15 each, delivered. There are now at least two firms who are manufacturers of telephone apparatus located in Toronto, viz., The Century Telephone Construction Company, and the Stromberg-Carlson Telephone Manufacturing Company. These firms are strictly independent, and so far as our dealings with either of them are concerned, have proven very satisfactory.

W. DOAN, M. D.,
Manager Harrietsville Telephone Association.

[Note.—Another company to whom we would refer our readers is the Northern Electric and Manufacturing Company, of Montreal, P. Q.]

Manure Mixed in Shed and Hauled Weekly.

Editor "The Farmer's Advocate":

Your article, "What about the Manure Pile," in the "Farmer's Advocate" of Jan. 10th, calls for a wide discussion. We have handled manure in several ways. The old way was to leave it in the barnyard till spring and then haul it. Last year we drew the manure out of the barnyard and piled it in the field, and last fall put in on fall-wheat ground. Some of this, being merely straw (which was fed plentifully at the last end), burned in the pile and was damaged.

Last summer we remodelled our barn, and in one end have an enclosed shed, where we put the horse, cow and hog manure. The manure does not freeze, and is all mixed together, making its strength more even on the land. Every week or two we haul it out and spread it on our root ground. We like this last way the best. We have cement stable floors, and practically no liquid wastes, as it is all soaked up in the straw. By putting the manure in the shed, the loose straw gets mixed with the manure, and is not taken to the field dry, as is sometimes the case in hauling it out of the barnyard.

By hauling in the winter, the work is done in a slack season, which is quite an item in these days of scarcity of labor. By doing it a little at a time, it is done more easily. We think no more is wasted in the winter hauling than if it lies in the barnyard and is subject to rains and the snow melting and carrying it off.

Northumberland Co., Ont. S. L. TERRILL.

Leaking Cement Tank.

Editor "The Farmer's Advocate":

For the information of "Reader," in your number of January 17th, I would say give the tank a coat of Portland cement one-eighth of an inch thick, and all trouble will disappear. I have five water tanks, four of which are made of concrete, and one of three-inch pine deals. This last one gave me trouble on account of the foundation, which was not solid. I made this all right, and it is now perfect. If "Reader" looks well, he may find small cracks of a hair's-breadth through which the water will leak out. This sometimes happens to mine if the water is allowed to freeze. In such cases I open the cracks with a trowel and fill them with cement, and the trouble is over. I cannot see how water can leak through good cement, if properly mixed and worked. I use none but Portland cement, and have no trouble.

AMATEUR FARMER.