

is most beneficial to their health, helps the development of bone and muscle to an amazing extent, and the chewing and slow digestion of whole grain, sparingly fed and slowly picked up, have a most beneficial and strengthening effect upon the digestive apparatus.

There are two ways in which suitable foods can be given to the young pigs without being gobbled up by the old sow. One way is to feed them while the mother is out for exercise, and the other to place the food in a raised-off corner of the pen, the railing being so constructed that the young pigs can pass through and reach the food, whilst the sow is shut out, not being able to pass between the bars. If the first mentioned plan is adopted, the sow should be let out for exercise morning and evening, so that the youngsters can be fed from the trough at these times. Troughs for suckling pigs should be shallow, and not too wide, so that they can reach the food without getting into the trough. It is best, also, to have them only about three feet long, and made of light but tough wood, so that they can be easily removed from the pen and cleansed after each meal.

REGISTRATION DIFFICULTIES.

Editor "The Farmer's Advocate":

I noticed your editorial re requirements as to registration in the National Records. I have been thinking of writing for more light on the subject, but did not know who to apply to. I have been asked several times lately by men wanting to get business done at the registration office who could not find out the address. When this new style came in, I was supplied with some forms and addressed envelopes. I got along all right as long as they lasted, but now they are used up, and I have written several times for more, but no attention is paid to my request. They don't let us know, as the other officers used to do, when they receive money. I sent in my membership fees, and never heard anything from them, so I wrote asking about it, and received a reply stating they had got it all right. But that is no way to do business. I have not received my copy of the herdbook for this year yet; perhaps it is still in the printers' hands, but it should have been distributed long ago. There are many who wish to correspond with the registrar's office, and it is almost impossible to find who to write to. The secretary certainly should have a name and a place of business known to the public, same as the old office and secretary had. Everyone knew how to address a letter to our late secretary. Perhaps, if we keep on at them, they will make things a little easier or more get-atable. CONSTANT READER

Simcoe Co., Ont.

The Alberta Farmers' and the Central Alberta Stock-growers' Associations last month interviewed Mr. Findlay, Minister of Agriculture in the Province of Alberta, on the matter of establishment by the Provincial Government of pork-packing and beef-canning plants along lines similar to those on which the Government creameries are operated. In reply, the Minister called attention to the fact that the Province has but recently entered upon the second year of its existence; that during the first year it took over and enlarged the creamery system which had been previously conducted by the Dominion Government; that during the present year it was developing the poultry-raising and fattening industry, and that if this is worked out satisfactorily, and the farmers gave the support they had pledged to it, the Department might see its way clear to undertake new enterprises in their interest.

THE FARM.

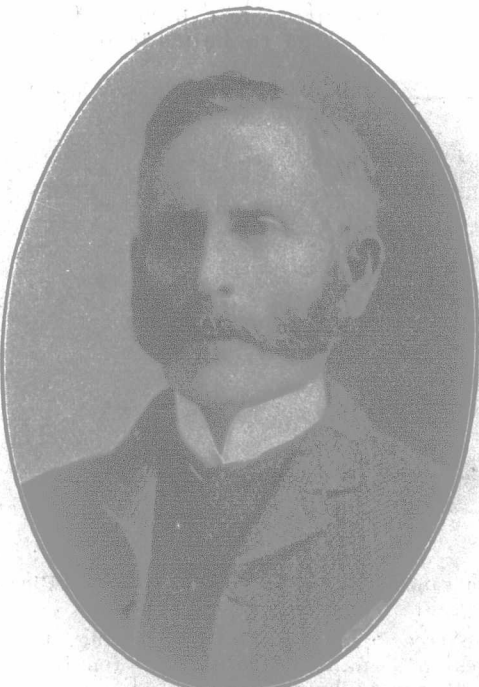
A PIONEER FARMERS' INSTITUTE WORKER.

Mr. John C. Shaw, of Norwich, Oxford Co., who has recently returned from lecturing at Farmers' Institute meetings in some twelve counties of Ontario, beginning at Toronto, through the Niagara Peninsula, Middlesex, and finishing in Huron and Bruce, reports that the farmers are in a prosperous condition, and apparently well satisfied with the proceeds of the past few years. In the Niagara District very large returns have been realized from the production of all kinds of fruit. Other districts are interested in raising grain, dairying, bacon hogs, beefing, and the horse industry, which latter at present is probably receiving more attention than some other lines, on account of high prices.

Mr. Shaw is a thorough believer in the nobility and utility of farm life. He is a Canadian, and has high hopes for the future of Canada, and especially of Ontario. He is one of the first Institute men in Ontario, being one of three or four who organized the first Farmers' Institute of Ontario, which was held at Hamilton, having for its president Valancey E. Fuller, and Prof. Thos.

Shaw for its Secretary. Since then he has continued as a worker, though in a quiet way.

We are also pleased to learn that Mr. Shaw has been a reader of "The Farmer's Advocate" since its inception in 1866, and has noticed with pride the continued advancement it has made since the first publication, which was a very small monthly magazine, until now it is the best weekly farm paper in America for the Canadian farmer.



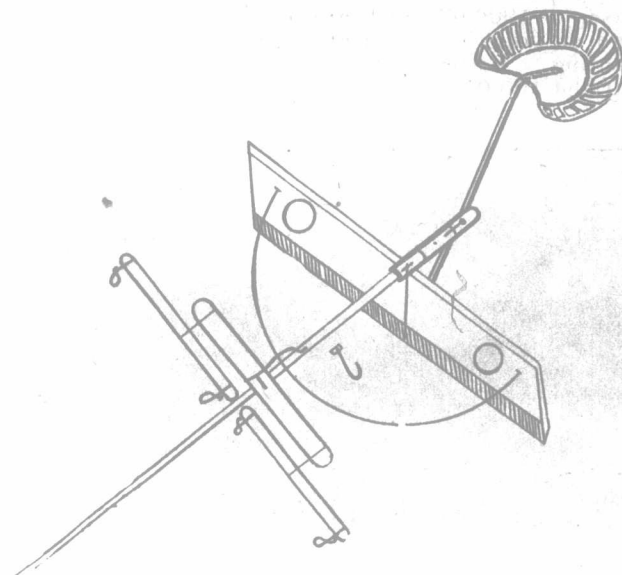
Mr. John C. Shaw.

A reader of "The Farmer's Advocate" since 1866.

THE LEVELLER AS USED IN QUEBEC.

Editor "The Farmer's Advocate":

For some time I have read with interest the articles written in "The Farmer's Advocate" in regard to the split-log drag for levelling clay roads. My opinion is that we have better road-scrapers in this district than the split-log drag, although there are some farmers here that use a flat piece of timber, with iron on the face, and drawn on the angle. It works all right on light land, but on heavy clay roads I do not think it will work as well as the one described below. Road-scrapers, as they are called here, are just about as plentiful as mowing machines in the County of Chateauguay, and the only mistake that some people make with them is that they do not use them often enough; to keep clay roads in good shape, they require to be scraped always



The Old-fashioned Leveller, with a Seat Added.

after rain—as soon as the road is dry enough not to stick or drag in front of the scraper. One improvement on this one is that it can be changed to any angle in a few minutes just by slackening a nut.

How to Make a Scraper.—Take a good hardwood plank, 7 feet long, 2½ inches thick, and 14 inches wide; hew a little off the lower back edge to allow the front to come to the ground when the pole is raised, as it puts the plank off the plumb. Bolt on a piece of flat iron, about 3 inches wide and ½ inch thick, onto the bottom face of the plank; bend the bottom edge of the iron a little to make it cut, and project it ½ inch below the edge of the plank. For a pole, take a piece of wood suitable for a sleigh-pole, but between 4 and 5 feet longer; take a piece of 1-inch round iron, punch two holes, and bolt to back of plank and in the center; leave the iron long enough to

go through the pole, punch a hole just above it, and put in a key. Project the pole about one foot past the plank, to allow for a brace from the bottom of plank to the end of pole. Put a piece of band-iron around the end of pole and back past the iron where it is fastened to the plank, to keep it from splitting. Get an old wagon tire of good weight, and cut it in two pieces; only the one half is required. Bend the two ends, punch a hole, and bolt to the center of plank, and allow the top of circle to rest against the bottom of pole; fasten it to the pole with a bolt with a hook on the end. By tightening up the nut, it will keep the scraper in any angle desired. Put a ring on each end of plank to lift it over bridges or obstructions. Bolt a mowing-machine seat onto the end of pole. Put the whiffletrees on top of pole, just in front of circle. Cut the pole the required length, and the scraper is finished. The cost of one, without the whiffletrees, is about \$5.00.

Chateauguay Co., Que.

[Note.—While appreciating our friend's interest and trouble in sending the above illustrated article, we deem it well to point out that the drag he has been using is the very one we have repeatedly enjoined our readers to construct. The split-log drag, however, is a new thing, and differs from the leveller essentially in time and manner of use. The leveller is employed to smooth down the roads after they are crumbling dry; the split-log drag is used to puddle the clay while wet. Which is the better, we hope to know positively next fall.—Editor.]

BARN ROOF CONSTRUCTION.

Editor "The Farmer's Advocate":

In a late issue an inquiry was made regarding curved-roofed barns, appended by an editorial note soliciting information from anyone who has had practical experience with same.

Two years ago I built a barn 52 x 68 feet, on which I put a roof similar to the one queried after, and different in some respects, perhaps, than any then in the Province, although it has been copied by two new barns erected in this vicinity. Most everyone who sees it considers it the best idea in barn-roofing yet applied.

The roof is a perfect arc, with a radius of 27 feet, and an apex 18 feet higher than plate.

My barn is a balloon frame, double 2 x 8-inch pieces for plates. The 18 rafters, 4 feet apart, are made of 6-ply, tough, soft elm, 1 x 3-inch strips, thoroughly nailed together, in a form corresponding to required curve of roof, strip by strip, beginning with the two inside ones. When taken out of form, the entire rafter has scarcely any tendency to spread, and can be placed arching from plate to plate, with the weight resting perpendicularly at the ends. The four inside strips are beveled to rest flat on the plates, to which they are thoroughly spiked. The two outer strips continue over the plate, and support the eaves.

On my roof I saved about 5,000 feet of sheeting, and used 2 x 4-inch ribs, placed about 2½ feet apart, on which I nailed the corrugated roofing. At the peak there should be two strips, from end to end, of 2 x 8-inch pieces, placed edges together, with joints broken. I had the corrugated galvanized sheets bent in factory to suit the curve of my roof.

The inquirer has been told that corrugated roofing, by contracting and expanding, loosens the nails. Now, it seems to me that is where this style of roofing has the advantage. The corrugation allows the sheet to give and take without affecting the nails, whereas if it were flat, with a straight pull, the nails would have to give. Of course, I cannot tell what it will be like in a hundred years hence, but at present, with my limited experience, I have faith in it; and if I were to build again, would build the same, except in a few minor points; I would make apex of roof 20 feet above plates, instead of 18.

Some of the theories that decided me in the plans I adopted were these: An arch is the strongest form of structure. Every part is supported. Rafters made of bent hoops have all the strength of the grain reinforcing the strength of the curves. The strength of a sheet of metal is greatly reinforced both by being corrugated and by being curved, and this extra strength is imparted to the roof. The 2 x 4-inch ribs stiffen the roof more than inch boards, reduced the weight to less than one-third, and saved me, with hemlock lumber at the present price of \$23 per thousand, \$80 on my roof. The corrugated sheets are the most easily applied of all roofings.

Perhaps I have made my answer to the inquiry longer than necessary, but I trust there are hints in it that may be of use to more than the present inquirer. In fact, I have for some time been desirous of reciprocating some of the benefits I have received from your excellent paper, by giving some ideas I worked out in my experience of building.

Middlesex Co., Ont.

EDGAR M. ZAVITZ.