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Vol. XLVII.

EDITORIAL

Our national highways should be railroads. All the public highways we need are township and county roads.

The boy who has never helped tap maple trees and make syrup or sugar has missed one of the real joys of existence.

If there is not ar shelf of good books of refernce for the farm and home in the local library, why not take steps to have one filled before another year passes round ?

The poles of the earth may be attained, but the poles of human endeavor in science, art, agriculture, education, government, and half a dozen other spheres, remain to be explored.

The Creator provides a Garden of Eden, and can't keep man in it. At the extremes of the earth He fashions inhospitable frigid wastes, but can't keep us out of them. Man is an adventurous creature, truly !

there is anything to bring on, we expect some profitable results.

Some men save labor by rotting and leaching the manure pile to half its weight before applying to the land. But, while saving labor, they waste iertility. If, as Canadian and New England experiments indicate, a ton of fresh manure is worth practically as much as a ton of rotted, it would pay to hire men at five dollars a day apply the extra quantity to the land.

LONDON, ONTARIO, MARCH 21, 1912.

Hydro-electric versus Gasoline.

Within the zone served or likely to be served by the Ontario Hydro-Electric power scheme, about the most live practical question of the hour is the subject of farm power. Whether hydro-electric energy will be more economical or otherwise more advantageous than gasoline is the interrogation point on almost everybody's mind. The gasoline engine has already given a good account of itself on thousands of farms. By hydroelectric advocates large hopes have been raised, but most of the claims advanced on its behalf have been very general. The problem is immensely complicated by the varying cost of distribution and by the uncertainty as to how much use the farmer would be able to find for electric current. In an endeavor to reduce the problem to a comparison of figures, "The Farmer's Advocate " has asked for experience from users of different kinds of farm power, and also referred a special request to Prof. Wm. H. Day, Department of Physics, O. A. C., Guelph. Prof. Day was asked to suppose a typical or representative case, and calculate whether gasoline or hydro-electric would be more economical under such a set of stated conditions. Instead, he has approached the question from a somewhat different angle, Can anyone suggest a better use for barnyard comparing the cost of grinding with a ten-horsemanure than spreading it over meadow land, to power electric motor with the cost of grinding be eventually broken for crops like corn? We with two gasoline engines, one six and one eighthave been treating some of the poorest knolls in horse-power. For purposes of comparison, Prof. our new seeding that way this winter, and where Day reckoned gasoline at 20 cents per gallon, while hydro-electric was estimated on a flat-rate basis, at \$50 per horse-power per year, an estimate attributed to Hon. Adam Beck, speaking some time ago at Guelph. A flat-rate basis means that the power contracted has to be paid for whether used or not. The economy of hydroelectric, then, as indicated by Prof. Day's tests, resolves itself into a question of how many hours per day a farmer could employ the maximum amount of current he would need for his ordinary work. In this connection, we quote here the es-

consider as the relative interest and depreciation charges on gasoline engine and electric motor; their relative convenience in use, reliability, fire risk, and the fact that electricity is readily adapt-Along these lines we are able for lighting. pursuing our inquiries further. Meantime, the figures published in this issue will stand some rumination.

No. 1017

Build Silos.

One of the best monuments a farmer can rear to his own enterprise is a big and permanentlyconstructed silo. Of materials he has plenty of choice, from wood to steel. In making a selection, he may be guided by a number of important considerations. Where buildings are not permanently arranged, there is much to be said in favor of a removable structure ; but, on the other hand, where the layout is definitely decided or fixed, cement-concrete presents strong claims. Lasting as the hills, almost, it has the further advantages of being practically rat-proof and fire-proof, while it is also an easy silo to roof rigidly. That it is virtually proof against rats is obvious enough, but readers may not all be aware of its fire-resistant qualities. However, in "The Farmer's Advocate" of Nov. 9th, 1911, appeared an illustration of a round cement-concrete silo on the premises of the Boys' Farm and Training School, at Shawbridge, Que. This silo, it is said, stood practically intact after a fire which destroyed the other farm buildings surrounding it. Whether this favorable experience would always be repeated, we cannot undertake to say, though we suspect that a well-built silo would stand a fairly severe test.

As to the keeping of the silage, nothing could be better than a properly-built cement silo, made of material mixed about 1 to 8, smoothly finished and washed both inside and out. The only objection is a tendency of the silage to freeze to the sides during cold weather. For this reason it might be desirable, in very cold climates, to build of cement blocks or some other form of

Who wants a system of national trunk highways? Is it farmers, most of whom live from twenty to five hundred miles of the probable route of them, or is it automobile users wishing to tour the country, filling our nostrils and covering our fields with dust, while horse-drawn vehicles are crowded off to the side-roads? Whose xe is being ground by this agitation for Federal d to roadmaking?

Is your harness oiled, seed grain cleaned, and bagged; clover and grass seed mixed; implement equipment ready for business; manure all out on the land; summer fuel supply on hand; heavy teaming done; team conditioned for spring work ; any necessary fencing material on hand, and everything straightened up around the buildmoney in seeding time.

li you have not before kept a farm garden notebook, start this season. Put down the names of the varieties you grow, where the seed was obtained, the dates of planting, notes re cultivation and manuring, when the hotbed seeds were sown, when plants were transferred 16 the cold-irame or the open ground, date of ripening, yields, and other information that will be of value next season. Now is the time to plan the farm garden for 1912, and secure your supplies of good seed.

ential part of Prof. Day's tables

From four tests, the average cost of grinding 100 pounds of grain was as follows :. By gasoline, at 20c. a gallon..... 1.98 cents. By hydro-electric, if full amount of current were used continuously 0.293for 24 hours per day By hydro-electric, full current used 0.58612 hours per day By hydro-electric, full current used 1.1726 hours per day By hydro-electric, full current used 31 hours per day..... 2.010By hydro-electric, full current used

3.5162 hours per day By hydro-electric, full current used 1 hour per day 7.032

From this table, it will be inferred that a ings? Spring is due, and every day is worth farmer who could use his full amount of current for $3\frac{1}{2}$ hours per day, or a lesser amount for a proportionately longer time, grinding with hydroelectric would cost practically the same as grinding with gasoline. Where less than this amount of power were needed, the cost with hydro-electric would be greater, while, with more extensive employment of current, the cost of grinding with hydro-electric would be less than with gasoline. In short, hydro-electric, at Mr. Beck's estimate, would be very cheap power if all the current purchased could be used. If only a little of it could be used, it would be very dear.

hollow construction. In our own monolithic silo at Weldwood, about a foot of material adhered to the wall during January and early February. About the middle of the latter month, when the weather moderated and the sun warmed the south side of the wall, we took advantage of the opportunity to pry off the accumulation from day to day with the ensilage fork, allowing it to thaw out in the stable before feeding. We have now been feeding this for a full month, and, notwithstanding that there has usually been a certain amount of frost in the silage when fed, the cattle have eaten it up clean, and have done well on it. It smells good when thawed out, and the kernels of corn have that tart, sub-acid taste characteristic of first-class silage. Had there been any imperfect keeping, it would be evident here at the wall. But there is no such sign. Moreover, since the first two or three feet from the top, we have not found a moldy forkful in the silo to date. Of course, our silage was made from well-eared, well-matured corn, distributed in the silo with a jointed pipe reaching down from the blower mouth, and solidly tramped by two men, assisted at the top by a third, and afterwards a fourth. Our silo and silage have been an unqualified success. Since filling, about the first of October, we have fed an average number of about 25 cattle an average quantity of about 40 pounds silage per head per day, and at present writing, in the middle of March, we still have There are, of course, such further points to a solid ten feet of number one feed, unrivalled as