THE FARMER'S ADVOCATE

AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE

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JOHN WELD, MANAGER.

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THE FARMER'S ADVOCATE AND HOME MAGAZINE ned every Thursday. (52 issues per year.) it is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve The FARMER'S ADVOCATE AND HOME MAGAZINE, Descriptions of New Grains, Roots or Vegetables not generally known Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.

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pharmaceutical preparations, and in microscopy Under various trade names, it has been put upon the market as a "harmless" preservative of food products, but the highest authorities condemn its use in any quantities as a preservative of foods.

Every year we hear of some new purpose to which formalin is devoted. It is cheap, and not violently poisonous, though, taken internally, it is poisonous, and formaldehyde gas is very irritating to the eyes-like oil of mustard. It may be purchased in quantities of a gallon or more for \$4.00 a gallon. Every farmer should keep a supply on hand. It should be remembered that it is liable to waste being volatile who to the air, losing moisture and becoming solid.

REGISTRATION REQUIREMENTS.

Judging from the number of letters reaching this office, inquiring whom should be addressed for forms of application for registration of pure-bred stock under the Canadian National Live-stock Record system, there appears to be defect in the system, in that the name of no officer is publicly announced to whom correspondence should be addressed for entry forms and information as to registration fees and other requirements. The fact that four letters from new subscribers were received at this office in one mail delivery last week, asking for this information, may be accepted as evidence of the acuteness of the felt want in this connection, and although we have repeatedly published the statement that the half-suppressed announcement of the Record Board is that all correspondence for such information as to be addressed to the " Accountant," it appears that only higher-degree members are in confidence enter with the name of that important office an awkward arrangement at best, but appear to be only business, and in the the Record Association, as well as of throughout the country, that some conpublic announcement of the requirements of new system of registration should be kept la the people interested for their information.

THE EVOLUTION OF ROADS.

An interesting story might be written, had we the space, of Canadian roadmaking. After the blazed trail and the corduroy, a few arterial highways that the pioneers and the stage coaches used were flung across the country, and a network of concessions and side-lines appeared. Being a new country, land was no object, hence roads of magnificent widths and imperfect construction. The complicated, go-as-you-please, statute-labor system of roadmaking and management was instituted, the commutation of which, and the inauguration of the "Good Roads" movement, ushered in another evolutionary period, through which the country is now passing. In the early days, speed in laying the roadbed was the one essential, hence fundamentals were disregarded, and people forgot the lesson of other lands, that even a good stone road for heavy traffic needs constant oversight. We are learning slowly the advantages of system, thoroughness and simplicity. When we say "system," we do not imply that the same plan is applicable in every municipality or on every road, because of the variations of surface and subsoil, natural location, climate and traffic, but certain general principles are to be observed. Graded to a fair crown and thoroughly drained first, a light coating of gravel (not stones and rocks), undoubtedly gives a better wearing finish to the road, but in a large proportion of districts it is not available at reasonable outlay, and, besides, gravel is not a panacea for all the ills that roads are heir to in a country of intermittent frosts, snow, rain and dry spells.

How to care for the earth roads is, therefore, a live problem. What our municipal machinery should provide is some means of responsible road care on every "beat," with drag, leveller and shovel, so that a hole will not be permitted to grow into a rut and culverts may be repaired before someone has a bill for damages against the municipality. How are these earth roads to be managed? Once graded and drained, can they be left to shift for themselves? Most assuredly not. What they need is surface care. In isolated cases, the efficacy of this, voluntarily done, has been proven. What seems to be needed is a more general demonstration. Recognizing the force of this, Mr. A. W. Campbell, Deputy Minister of Public Works for Ontario, as Provincial Highway Commissioner, has kindly undertaken to superintend and make the awards in a Split-log-drag Competition, for which two sets of prizes, one for Eastern and the other for Western Ontario, aggregating \$100, are offered by "The Farmer's Ad-According to the conditions, published vocate." elsewhere, there are no entry fees. Competitors simply make and use the implement according to directions, at least five times during this season prior to Oct. 15th. The day for the closing of the entries, which are to be sent to this office, is March 27th. Entries are coming in a most encouraging way, and we hope to see a very thorough demonstration of what the people can accomplish by a simple and economical plan.

WHAT TO DO WITH THE INDEX.

In response to many hundreds of special requests, we are publishing in this issue a full index of the articles and illustrations in "The Farmer's Advocate" during the second half of 1906, including the months of July and December. For convenience in printing and mailing, the index is bound with this number, but is purposely placed in the center of the book so that its removal will not spoil the number. Subscribers who have last year's papers on file will consult their interests by raising the wire stitches, removing the pages containing the index, and pasting them at once inside the front cover of the sie July 5th, 1906. It is costing us hundreds dottars to publish this index. Make use of it. till save time and dollars, and he a great vec of satisfaction in many ways. A volume 15. Farmer's Advocate " contains more it enormation for the Canadian farmer Drour library

HORSES.

DR. STANDISH ON HORSE PRODUCTION

The following address was delivered by J. Standish, V. S., of Walkerton, Ont., before a New It is good straight talk, Brunswick audience. and worth reading :

The subject of horse-production should receive the serious consideration of every agriculturist, not only because good horses command such high prices when offered for sale, and are so scarce in this Province that many medium animals are annually brought in from other Provinces, but because they are such a strong factor in all agricultural pursuits, being the motor-power in all successful farm operations; and, as it is desirable to have as much power in every horse on the farm as can be obtained, I consider it advisable to produce large horses in every class, whether it be light harness horses or heavy horses. And I shall advise the production of draft horses, because: First, they are useful for farm and other work, and profitable when offered for sale; second, they can be worked younger than other horses without injury. They can be worked at two years old, and, if carefully handled, will be the better for doing so; and the work done should pay for food consumed until they arrive at a marketable age, about four years off, when they command good prices. Third, they are easily eduat least every farmer can educate a draft horse-that is, teach it to stand, to walk well, and draw a reasonable load. Fourth, they are not so liable to become diseased, and small blemishes are not so great a detriment.

Now, while I recommend the heavy horse, I well know that if a man possesses the skill necessary to produce high-class light-harness or saddle horses, and applies that skill, he can get a higher price for that class of an animal than for

a draft one of equal quality. I believe every farmer should produce horses sufficient for his use, and some to sell, as good horses are as profitable a product as is presented on the markets. But inferior ones are not; while ordinary ones will repay production, they are not nearly so profitable as good ones. Therefore, the aim should be to produce high-class animals.and, to do so, the breeder should make himself familiar with the desirable characteristics of the class he wishes to produce, and he should take the form and action that commands the highest prices in the best markets for his standard of excellence. Then, study the breeds, and decide which one possesses the characteristics he desires in the highest degree, then adopt that breed and stay with Select the best mares he has or can procurenot necessarily a pure-bred; condition her and mate to a stallion properly conditioned and of the desired conformation, and a long line of pure breeding through desirable families—that is, families of superior merit as to form and action. Keep the best females, mate them in the same careful manner as at first, and satisfactory results will fol-Castrate all male foals and place on the low. Never keep a cross-bred or mongrel market . animal entire. Never use an entire animal that is not pure-bred and of the breed your females are, or are grades of. Be careful in deciding as to breed in beginning, then stay with it, as there is not any cross-bred or mongrel that is better than a pure-bred, and great loss is the result when cross-breeding is practiced, as by line-breeding it is possible to obtain a pure-bred e, which is not the case in cross-breeding; therefore, I will say, decide upon the breed, stay with it, never cross-breed after the first time, never use a sire that is not pure-bred and long line-bred through high-class families, and well conditioned; raise the foal well, and that should rommence while the mare is carrying it; give sufficient food to keep her well and nourish the foal. After the foal is born, keep up the supply of food of a succulent nature. Good grass, a large portion of which is clover, is as good food as could be desired, and that, with sufficient good water at all times, is all that is required, unless it is necessary to work the mare, in which case it will be better to give some oats to the mare. Before weaning the colt, which should be at about five months old, teach it to eat a small quantity of oats and wheat bran mixed, and wean by allowing it to suck twice a day only for a few days, then once a day for a few days, and once in two days for a time, giving a reasonable quantity of oats and bran, plenty of grass and water, and it will keep up in flesh and grow well. Then, for the first winter, give sufficient food and water, with plenty of exercise. The food, if convenient, to be composed largely of good clover hay, some oats and wheat bran; a small quantity of flaxseed: some oat straw and wheat chaff, with roots, preferably turmps, but mangels, sugar beets, carrots, or a few potatoes, are good food. Keep the feet levelled when needed; that is all that is required In the spring, turn to grass and water. The next winter feed as during first winter, only a greater quantity of food will be required; and in leisure time educate the colt to stand, to have its feet handled, and to stand on three feet and have the one held up and tapped with a hammer; make