

THE FARMERS ADVOCATE AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

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Agents for "The Farmer's Advocate and Home Journal,"
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1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and homemakers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
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12. 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.
13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

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million dollars. In the Arkansas agricultural school legislation it is provided, after the building and temporary work, that all work in and about said schools, including farming and care of stock shall be done by the students. Each school is controlled by a board of five trustees "who shall be intelligent farmers," appointed by the government of the state for ten years. Students must be at least fifteen years old. With the inauguration of these schools Arkansas has in operation a definite system of agricultural education, beginning with the common schools and extending through a four years college course. From an account of these schools, written in bulletin No. 250 by C. H. Lane, assistant in agricultural education office of experiment stations, U. S. Dept. of Agriculture, they appear to be conducted in commodious and handsomely equipped buildings, connected with farms conducted to suit the needs of the institutions and the farming country from which the students come. There are dormitories for boys and girls. In the Russellville school the plan is to provide an acre plot for each student to be responsible therefor. The tuition is free, but there is a charge for actual cost of board. The Magnolia school opened early in 1911 with a dormitory capacity for seventy-five students which soon proved inadequate, and a new dormitory with accommodation for 128 students has been provided. The four main buildings cost \$45,800 besides cottages for the teachers. Magnolia gave a \$50,000 bonus and four-hundred acres of land towards the school—nothing stingy about Magnolia which is to be one of the finest home towns in south western Arkansas! The fourth District School at Monticello is a fine, well conducted institution, with an enrollment of 201 regular students and 50 short course students whom the photogravures show to be an enthusiastic and enlightened class of young men and women. It is safe to conjecture that the boys and girls of Arkansas will grow up with a pride

for agriculture and home life, and will not be swarming off to the cities to toil in sweated factories, stand behind counters or drag in an existence and street car conductors.

HORSES.

Keep a supply of oats in the colt's box, and watch him grow.

Care should be exercised in feeding oil meal to horses, as it has a laxative effect, and may, if fed in too large quantities, cause scouring. This should be borne in mind by fitters who are preparing for the fall shows.

We are inclined to think as Henry, who, in his "Feeds and Feeding," says: "A healthy horse needs nothing but good food, pure air, plenty of exercise, with due attention to cleanliness, and regularity in feeding and watering; and when all these things are attended to properly, the drugs and nostrums that stable lore prescribes as 'good for horse' would be better thrown to the dogs."

Quids of grass, finely chewed and rolled together, and found lying about in the horse pasture, are the result of trouble with the teeth. No horse should be permitted to go until his teeth have become so uneven. Horse-owners should make it a practice to have the teeth of all their horses about which there is any question, examined and cared for by a capable person.

Do not jam the horse's manger full of hay at noon. He does not require a heavy roughage ration at this feed, and if hay is left in the manger until night, and not removed, it serves to "stale" the entire evening feed. How would you like to finish your noon meal at night, and off the same plate, unwashed? The horse is sensitive about his diet. The greater part of the hay should be fed at night, but even then, more than is eaten up clean before morning should not be given.

Alfalfa for Horses.

Much is said about alfalfa for dairy cows, young cattle, hogs and sheep, but few have regarded it seriously as a horse feed. There is no doubt but that well-cured alfalfa makes one of the best hays for winter feeding of farm horses. A recent issue of Wallace's Farmer contains the following, taken from an Illinois Farmers' Institute circular:

"In Western Kansas, farm horses have been wintered on a daily ration of ten pounds of alfalfa hay and some stover, and thin horses fattened on alfalfa hay and a little corn. It has been found that horses do not need a heavy ration of alfalfa hay. Fed with grain, probably 10 or 15 pounds of it is equal to a mangerful of other hay. Alfalfa has a nutritive ratio of one to four. An ordinary 1,000-pound horse, if given all he will eat of it, will eat from thirty to forty pounds in twenty-four hours. The alfalfa contains about 11 per cent. of easily-digested protein, and the horse will take into his system nearly four and one-half pounds of protein, whereas about two and one-half pounds of digestible protein is all that an ordinary horse of 1,000 pounds weight, when at work, can utilize. If a horse is allowed to eat such quantities, half of it is wasted; moreover, it is likely to injure him by making him soft and easily sweated when suddenly put to work.

"It has been rumored that feeding alfalfa to horses produces kidney trouble. The foundation for this rumor is the fact that, when alfalfa is fed to a horse the first time, it does stimulate his kidneys so that there is a noticeable increase in the amount of urine voided, but the symptoms disappear in a short time. If alfalfa is fed in moderation, it is not likely it will ever so affect him.

"A prominent horse-owner says that before alfalfa came into use on his farm there were nearly always one or more horses with heaves, but since alfalfa has been used, not one case of this disease has developed, and that colic in his horses is a rare thing, and would probably never occur again if the men did not occasionally feed injudiciously of corn, or overfeed with alfalfa hay. Alfalfa leaves and stems are free from the small hairs that cover red clover leaves and stems, and which catch dust and irritate the bronchial passages of the horse; this is one reason that alfalfa is better than clover for horses."

The Horse Not Losing Ground.

"The Horse Must Go," is an expression which we often hear fall from the lips of some admirer of the auto truck, as he watches it, laden with its tons of merchandise, rolling steadily over the smooth city pavement. The increasing number of horseless carriages for pleasure, for speed, and for carrying heavy loads, leads one to stop and weigh the matter carefully. Must the horse go? Can the auto truck, the great tractor, the ingenuity of man in inventing and constructing machines, vehicles and implements operated by power manufactured within themselves, drive the horse into oblivion? Joseph Montgomery, Secretary of the Minnesota Stallion Registration Board, claims not. True, horseless carriages and trucks are increasing in numbers, but, as Mr. Montgomery says, never in the history of the draft horse has the future appeared so promising to breeders as at present. There is no reason, in the light of statistics, why the doom of the draft horse should be spelled by the auto.

Though the enormous number of auto trucks in the cities might lead one to believe that they were crowding the draft horse out of business, actual figures presented by Mr. Montgomery do not prove it. In Minnesota State alone, the number of sires used for horse-breeding increased from 3,544, on May 1st, 1910, to 4,445 on May 1st, 1912; and during the same time the number of registered draft sires increased in the State 35 per cent.

Never in the history of Chicago and St. Louis markets, the two largest horse exchanges in the United States, has the demand been so keen or the prices so high for high-class horses of all types. Statistics from the United States Bureau of Animal Industry show that the number of horses in that country has increased from 13,500,000 to 21,500,000 in the past decade. The average value of all horses in the United States has increased from \$45 to \$115 in the same period. This has occurred, despite the increase in the use of automobiles.

First-class draft horses have been almost prohibitive in price this year, because of the great demand for them, and a team of drafters has often sold as high as \$800 to \$1,000. The demand for high-class saddle and carriage horses in the Eastern cities has been so great that their prices have been almost prohibitive to many who operate automobiles.

All this should be very encouraging to horse-breeders both in the United States and Canada. This is a fair estimate of conditions in both countries, and when horses have increased at so rapid a rate the last two years, and prices have kept soaring, in spite of the increase, there is no reason to believe that the automobile will ever drive them out of business. Instead of the automobile causing a scarcity of horses, it would be more reasonable to say that the scarcity of horses has caused the temporary advent of the automobile and auto truck.

Farmers and horse-breeder in Canada, as well as in the United States, need not fear to produce more horses. If they are large, sound and serviceable, they will always demand the highest prices. The horse industry is founded on a permanent basis, and has no reason to conflict with the automobile industry in any way.

The Sure Breeder for Profit.

What horse-breeder is there but has had trouble with mares failing to breed? It is a common complaint in all districts. The Live-stock Journal, commenting upon the fact, says:

"Annually there arises the complaint that mares fail to breed. Mare owners and those who have some stallions alike share the exasperation and loss resulting, and blame weather, work and each other for the unfortunate results. Each of these factors exerts its influence at times, but the fact that on some farms some mares breed regularly, and almost as surely deliver strong foals and raise them, is evidence enough that unfavorable environment and imperfect care are not disastrous to all mares. Farmers do not select brood mares rigidly enough. So long as the mares are kept mainly for their work, and are merely bred on the chance of producing a foal, results will continue to be unsatisfactory. In France, brood mares are worked as a matter of economic necessity, but they are selected for breeding capacity. Mares that are not producers are sold. Probably this plan eliminates some mares through no faults of their own, but it makes sure work of catching the counterfeits and stopping their losses. The most profit from horse-breeding is derived from mares that will raise colts and at the same time do the farm work. If a mare fails as a breeder, she should be sent from that branch of the business before she perpetuates her failings through chance descendants. It is the sure breeder that pays, and it is the daughter of the sure breeder that is most likely to be a profitable producer."