

THE FARM

"Dry Farming."

There will be held at Colorado Springs, Colorado, U. S. A., beginning October 16th, two conventions that are of interest to farmers and their wives the world over. One is the International Dry-farming Congress, and the other is the International Congress of Farm Women. The former claims to be the largest and most active society in the world, with a propaganda devoted to better and more scientific agriculture, and the latter claims to be held under the first call ever made for an international gathering at which the problems of rural home life are to be the topics discussed.

Advocates of "dry-farming" are attempting to make of it a scientific term, and fling back at those who declare it a misnomer that there can be no such thing as farming without water, and it is gross ignorance to express such a thought. Approximately it takes 300 pounds of water to produce every pound of vegetable matter that grows, from a bunch of sage-brush to a geranium leaf, and nature only produces water in one way, viz., by precipitation. The precipitation that produces anything on the dry-land farm must have fallen at some time, although it may have been a half century ago. Therefore, they have built their theories largely around the conservation of moisture in the soil.

Dry-farming theories had been evolving for a good many years, and had acquired many advocates and something of a literature when the Congress was organized, five years ago. That body

land by keeping the top soil loose. This top soil, if loose, will not absorb the water below, no matter how much the hot winds blow over it. Let it become hard, and capillarity sets in. Maintaining this mulch involves harrowing or disking after heavy rains, and is a labor that the farmer in humid regions would probably avoid, no matter if it insured him against drouth.

Summer-fallow or tillage is the third great principle. In a general way, this means keeping a tract of land mulched and tilled for one or more seasons before planting it to a crop. The object is to secure two years' rain for that crop. Tillage is to keep down the weeds, which are great water consumers, and to maintain the mulch that will hold the water in the soil. This is a practice becoming very common in the wheat regions of Western Canada, where land is cheap and can be spared for crop production during a season.

Subsoil packing is particularly advocated by H. W. Campbell, after whom the dry-farming business is sometimes named. This is pressing the overturned soil upon the subsoil beneath. One object is to set up capillarity, and the other to gain a firm seed-bed. It is particularly advantageous where the soil is very light. A simple illustration will explain the mulching and subsoil packing, as some people are confused by the necessity of loosening the soil in one instance and packing it in the other. Take a lump of sugar and soak it in water. This is the subsoil. Lay a second lump upon it lightly, and call this the plowed ground. Water from the lower lump of sugar will not begin to rise in the second lump until it is pressed down. The subsoil packer is supposed to act in the same way with the plowed soil on the subsoil. Now take a bit of powdered sugar and

sprinkle over the top lump, and the mulch has been provided. Keep the mulch light and the water remains below, where the wind cannot evaporate it; but let it get hard and caked, and the breath may be used to draw out the moisture.

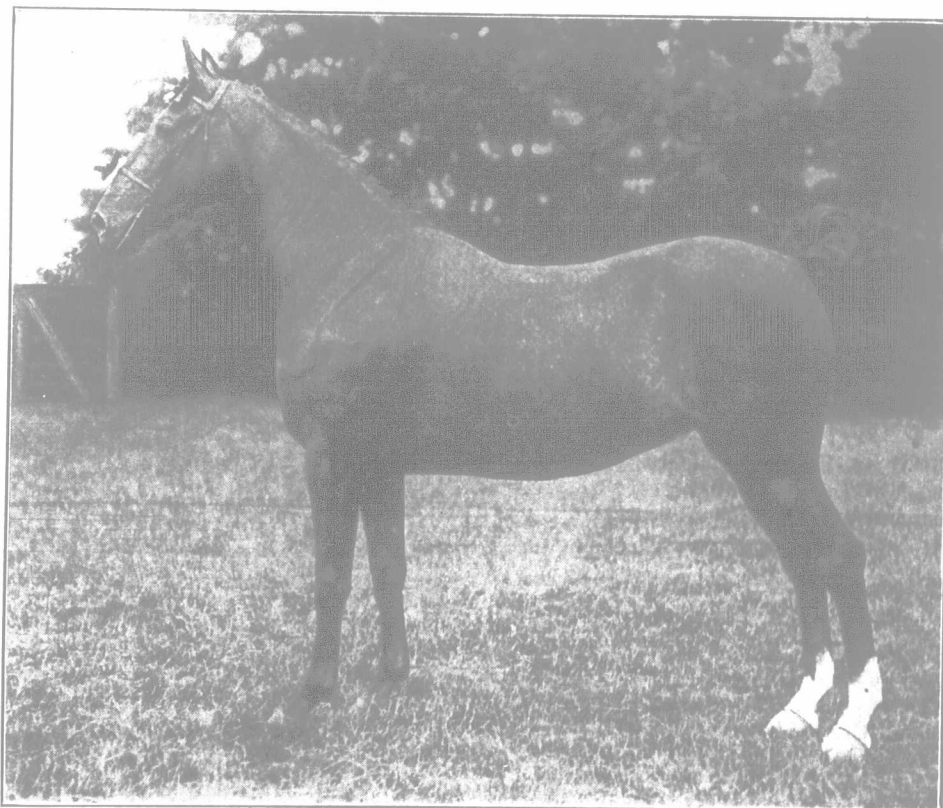
Men are thinking about agriculture as never before, and the U. S. Department of Agriculture is doing a splendid work. Some of this is in the line of helping to develop indigenous crops in the dry sections. The grain sorghums are among these—kafir corn, Milo, kowliangs, etc., that grow under great drouth conditions, and feed to stock nearly as strongly as does corn. Spanish peanuts grow in almost desert soil, and

furnish both hay and fattening rations for stock. Dry-land alfalfa, corn, and even fruits are being propagated. It seems to be merely a question of developing plants and seeds suited to short seasons and the variations of altitude and latitude, and these appear to be coming along with reasonable speed.

It is said that 35 per cent. of the tillable land of the earth now feeds the people under humid conditions. If the contentions of the dry-farming theorists are right, then this same soil could feed twice as many, because in very few regions do the farmers take out half that could be taken, and put back only a small portion of what they take out. Many of the new soils of the Western world are said to be worn out, and yet there are other lands where the soil has been farmed for thousands of years. So the dry-farmers advocate rotation of crops and other methods of preserving the soil or restoring it.

There are lessons in this that the man located in a region where the rainfall usually comes just right in the growing season may take to heart. He knows there may be a time when the rains fall; he knows that his "money" crops should be of various kinds; that he should give to every farming operation all the thought and effort that he is capable of. So there may be profit in getting in touch with these dry-farmers, intense, aggressive as they are in disseminating the doctrine. Of course, the best way would be to go to the Congress itself.

The Women's Congress is the outgrowth of former President Roosevelt's rural-life commission.



Beckingham Czarina.

Hackney filly, three years old. First and champion, Royal Show, 1911.

has been persistent and energetic, and to-day the Congress is the largest volunteer gathering held each year in the West. It has a membership of 15,000 paid-up subscribers, and branches in Brazil, Australia, South Africa, Europe and Canada. Also, it now maintains a big exposition of dry-farmed products each fall. The exposition and the headquarters of the Congress always follow the place selected for the annual meeting, and it may be of interest to state that Lethbridge, Alberta, expects to capture the next Congress, and is making a considerable effort in that direction.

It is the declaration of dry-farming advocates that the practices are as applicable and necessary in humid regions as they are on the dry lands, and that drouth, such as was witnessed in a large part of the world this year, would have little effect if the land was farmed as they teach that it should be. An examination of the tenets of the doctrine may be instructive.

Deep plowing seems to be the cardinal principle, and the reason is that the humus or vegetable mold upon which the plants feed is turned under to rot, and as many inches of under soil should be brought to the air and sunshine as possible. Also, deep plowing furnishes a greater reservoir for catching and holding the water that falls. The principal plan advanced for holding this water is by "mulching." The soil beneath a log that has long lain on the ground is moist, for the reason that the wind and sun have not been able to reach and evaporate the water. That constitutes a mulch, and the dry-farmers are able to show that this can be done over a large area of

Don't feed the sow too heavily soon after farrowing, especially if she is a heavy milker and has a comparatively small litter. Many young pigs are lost by becoming overfat, due to this cause, coupled with lack of exercise.

In pasturing hogs, whether it be on rape, clover or other pasture, it is generally found advantageous to use hurdles. In this way the pigs are kept clean, and their feed is also kept fresh, and not so much is lost from taint or becoming stale, due to the animals tramping over it and depositing excreta.

A Good Sire Invaluable.

The real value of an exceptionally high-class sire cannot be definitely estimated. It is something which lives not for one generation only, but is an influence which will be apparent for years to come. The Clydesdale breed of horses has had several outstanding sires, such as Prince of Wales, Darnley, Baron's Pride, etc., and their progeny have been in many cases great animals, which have passed on generation after generation their superior qualities. Who can estimate the value of these sires to the breed? Every breed of live stock has its notable sires, animals which have been largely responsible for the high degree of excellence that the respective breeds have attained. In fact, it is only the best sires that count for anything in the making and improving of the breeds. In selecting sires, it must be remembered that one of indifferent breeding value is capable of doing just as much harm in the stud, herd or flock as the high-class sire can do good. We cannot get away from inheritance in breeding, and just as surely as a defective sire is used, so surely will his same defects show in his offspring, and so on throughout the breeding career of the strain. The kind of sires that the breeder uses determines what his success will be in his business, and good success can only come from the use of the very best obtainable males. Do not think that one good sire is all that is necessary; that will only last a few years, and that when his period of usefulness is over, his place should always be filled by one of better conformation and breeding. Follow a system of improvement in selecting sires, and never deviate from it. Fix in your mind the type required, and stick to it until it is a realization.

More About Tuberculosis.

The Royal Commission, appointed to inquire into the relations of Human and Animal Tuberculosis found that the milk of tuberculous cows not containing bacilli as it leaves the udder, may and frequently does become infective by being contaminated with the faeces or uterine discharges of such diseased animals. Measures for securing the prevention of ingestion of living bovine tubercle bacilli with milk would greatly reduce the number of cases of abdominal and cervical gland tuberculosis in children, and such measures should include the exclusion from the food supply of the milk of the recognizably tuberculous cow, irrespective of the site of the disease, whether in the udder or in the internal organs. This goes to show the need of sanitary conditions in the stable, as well as the danger from cows affected with this loathsome disease. Stockmen and dairymen cannot be too careful, in buying new stock, not to get diseased animals; and, in the care of the milk, every possible effort should be put forth that milk which may be free from germs the moment it leaves the udder, does not, by reason of carelessness, filth, or bad handling, become laden with these deadly organisms, and thus imperil the life of the infant consumer.

The Hog Deserves Good Feed.

The hog makes a profit for his owner by paying a much better return for feed of inferior quality than could be obtained by the sale of this feed. Some persons seem to think that the main purpose of the hog is to utilize waste and unsalable products. Where such substances are on hand, it is good practice to feed them to the pigs, but, when the hogs will yield a good profit upon other and more valuable feeds, it is advisable to keep more of them, and not confine the hog industry to producing a few hogs on the waste material. Not only should more hogs be kept, but better hogs, and better methods of feeding and management should be followed.

Reliable Information.

I have taken your paper for a few years, and I know of no other paper that gives such reliable information as the old "Farmer's Advocate," and no farmer should be without it for the sake of \$1.50.

S. B. SHIER.

Ontario Co., Ont.