Treatment.—Again special attention should be given to preventive treatment. The premises in which the cows are to produce their young should be thoroughly clean. Where the germ is known or suspected to exist, the premises should be thoroughly swept and dusted, and then disinfected by thoroughly washing with a hot five per-cent. solution of crude carbolic acid, or given a thorough coat of hot lime-wash, with five per-cent. crude carbolic acid, or both.

In addition to this, the navel of the calf should be dressed as soon as possible after birth, and several times daily afterwards, until thoroughly healed, with a strong disinfectant, as a 10 per-cent. solution of carbolic acid or one of the coal-tar antiseptics, or a solution of corrosive sublimate, 20 grains to a pint of water. The writer prefers the latter lotion.

When a case appears, it is good practice to use lime water as for the common form, and if quite acute, to use opium as for the same. A mixture that is highly recommended is one made of 15 parts new milk and 1 part formalin, a calf to get 1 teaspoonful of this to each pint of milk taken. WHIP.

Cost of Pork from Packing-house By-products and Pasture.

Several tests with swine were conducted at the Ontario Agricultural College in order to determine the value of packing-house by-products and pasture in the ration for hogs. In all, three tests have been reported, one with pigs that had just been weaned to compare tankage and meat meal with skim-milk; another with pigs three months old at the beginning of the trial to compare the same by-products, and a third to compare rape and clover pasture with pen feeding. In all cases the cost of 100 pounds of gain has been moderately low. The accompanying tables will explain the results in less space than can be done otherwise.

Packing-house by-products are very concentrated, and consequently when they were used in a test they were sparingly fed, they constituted about 11 per cent. of the meal ration. The following table will indicate the values placed upon the feeds experimented with and from which the deductions were made. All commercial feeds purchased are set down at the retail price:

	Per Cwt.
Tankage (A)	$2.50
Tankage (B)	2.40
Beef meal	4.00
Skim-milk	0.20
Barley (poor quality and unsalable)	1.10
Wheat middlings	1.30

While these prices may not obtain at the present time, the cost of 100 pounds gain is calculated from these data, and by adding a certain percentage to the value of the feeds and the cost of gain the reader can adapt the experiment and its results to his own conditions. Very little barley was used in either test.

Results of Test No. 1.

Group	Av. wt. at beginning	Av. wt. at end of test	Av. daily gain per pig	Cost per 100 lbs. gain
	Lbs.	Lbs.	Lbs.	
I Tankage (A), meal and water	33.6	157.0	1.01	$ 4.33
II Tankage (B), meal and water	31.4	160.4	1.06	4.10
III Beef meal, meal and water	32.8	146.4	0.93	4.48
IV Meal and water	32.8	156.8	1.01	3.61
V Skim-milk and meal	32.4	165.8	1.09	5.00

This table is self explanatory, and it will be noted that the cost of 100 pounds gain was reasonably low in all cases. The pigs fed on meal and water did exceptionally well under the circumstances, making cheaper gains than the others. It will also be noticed that the skim-milk group made the best gains, but the cost was higher when we consider the milk at 20 cents per cwt.

In the second trial pigs three months old were selected and fed similarly to those previously mentioned.

Results of Test No. 2.

Group.	Av. wt. at beginning	Av. wt. at close of test	Av. daily gain per pig	Cost per 100 lbs. gain
	Lbs.	Lbs.	Lbs.	
I Tankage (A) meal and water	69.4	153.8	1.14	$4.23
II Tankage (B) meal and water	71.4	159.4	1.19	4.07
III Beef meal, meal and water	73.8	155.2	1.1	4.76
IV meal and water	70.4	159.2	1.2	3.34
V Skim-milk and meal	7.30	171.2	1.33	4.32

In both these tests the pigs fed on meal and water made the cheapest gains. Possibly in the counties of Essex and Kent, where hogs are extensively grown and skim-milk is not considered to any great extent, they have quite as economical a system of making pork as in other sections of the province where more milk is available. However, where skim-milk is a by-product on the place it can be turned to good account, as the results of these trials have shown. It is generally considered that, in the absence of skim-milk, young pigs should receive animal feed in some form or another. The groups fed tankage made cheaper gains than those fed on skim-milk, showing that the former product can safely be used as a substitute for skim-milk, but those allowed neither milk nor tankage outclassed all others in cheapness of gains, so one would naturally ask, "Why bother with the tankage?" The character and the amount of the gains made on skim-milk still commend that product as one of the best rations for swine, but these tests show that pork can be made reasonably cheap without it.

Pasturing Hogs.

Still more hogs were divided in groups to compare the value of rape and clover pastures, also to compare pasture with pen feeding. All groups were fed the same meal ration and each received an equal allowance of skim-milk, although the pigs on pasture were fed less meal than those in the pens. The values attached to these feeds were the same as in the previously mentioned tests. In valuing pasture, rent of land, cost of preparation, seed, etc., were all taken into account.

Results of the Test.

Group	Av. wt. at beginning	Av. wt. at end of test	Av. daily gain per pig	Cost of 100 lbs. gain
	Lbs.	Lbs.	Lbs.	
I Rape pasture	97.1	163.1	1.01	$ 4.40
II Clover pasture	95.5	171.1	1.16	4.08
III In pens	96.3	173.5	1.19	4.26

It will be noted that the pigs on clover pasture made the cheapest gains, while those in pens made the most rapid gains, and more economical gains than those on rape pasture. By way of comment on these results Prof. G. E. Day writes: "To be pastured to advantage, hogs should not weigh much less than 100 pounds when turned out.

The English Shorthorn Situation.

EDITOR "THE FARMER'S ADVOCATE":

It is good to read and to realize the sound view taken by the editorial staff of "The Farmer's Advocate" as to the Shorthorn situation, a critical one, in all conscience, when thoroughly understood in England.

It has all arisen because the Royal Agricultural Society of England refused to elect judges for the great show at Palermo, in the Argentine, and because the Americans have taken full opportunity of the chance given them to drive deeper home the wedge, the thin end of which was got in when America sent to Argentina, a selection of Shorthorns chosen by Secretary Harding for some of the large estancias over there. The Royal Agricultural Society's view was that war conditions were against Englishmen going over, but Englishmen are now up in arms and declare that such conditions would not have barred English buyers from going over if the Breed Societies had been asked to nominate some judges, instead of an Agricultural Society.

Among the Breed Societies and the Royal there is a nice little bit of feeling engendered, and an enquiry into the whole thing is being demanded. Englishmen have heard the call to the Shorthorn Society to "awake". A publicity campaign is to be started and some breeders have gone so far as to set about the formation of a Co-operative Sales Association to deal with all foreign and colonial orders for Shorthorns. The British Shorthorn Society cannot sell and cannot exist as a profit-making association without getting its rules of association altered into that of a company, liable to make profits —or losses.

At the moment, the future of the British Shorthorn Society is in the making, and what will be the outcome of all the ideas and suggestions that are floating about, no one can say Certain it is that the British are not going to lose the Argentine trade without a great fight. America has offered to "share" the trade of South America, but the Englishman says, "No—I'm going to have it all, or at any rate, all the best trade, as I have had it in the past and no half measures for me."

The idea appears to be in U. S. A., that we are short of tip-top-quality cattle in England. Such a state of affairs does not exist. We are not reduced to eating our pedigree cattle, not by a long chalk yet; and the country was never so full of tip-top cattle—beef and dairy Shorthorns—as it is at the moment. Our subsidized governmental schemes of aiding live stock improvement are doing great work among the farmers, who are investing in first-rate pedigree stock and selling off their grade stuff, which is commanding tremendous prices in the public markets. The English breeder is not going to give in to the American without first of all rousing his own Shorthorn Society out of its slumbers, and then very likely acting on his own initiative in the end. I should not be surprised if an International Shorthorn Trading Association is started, for I hear there are a few breeders who have got their heads together and have "selected" an organizer already. He is a first-class salesman, one who knows where the "goods" are and can get them delivered.

The Dairy Shorthorn Question.

I must say I was rather startled to read the editorial comments in the Farmer's Advocate regarding the possibility of converting the dual-purpose, or dairy Shorthorn into a red and white Holstein, or a mere, milkmaking machine. We are not going to do that. We are not Record Gone Mad yet. We do not try out our milking Shorthorns on all kinds of stunts. We are quite satisfied with the knowledge that the Shorthorn will milk out better than most breeds, and can be converted into beef quicker than any other breed. There is no need for Canadians to fear danger ahead or breakers upon which the dual-purpose breed will wreck itself. Our leading men here have a clearly defined object before them. They are breeding dual-purpose cattle and not merely dairy cattle. Over here we know perfectly well the distinction between the two. Experts are working quietly but surely on the perfection of the dual-purpose, but you can take it from me they have not yet seen any good to be got out of a lot of records which can be twisted into any old shape.

Still the Farmer's Advocate's note of warning has not been lost upon the Dairy Shorthorn Association in England. It is composed of a body of men who are not likely to be led away by Records of Performances, run riot. They are not going either to lose the dairy Shorthorn's true character and convert her into

A hank of hair, and
A bag of bones.

That time is a long way off, yet.

ALBION.

[Note.—Of course our cautioning re going too far with milk records was particularly for Canadian breeders but we are glad it was read and heeded in Britain.—EDITOR.]

THE FARM.

What the Women of England Are Doing.

EDITOR "THE FARMER'S ADVOCATE":

Those soldier men, fighting for King and country the world over, who in time of peace belonged to the countryside and its industries, will be glad to know of the noble work their sisters are doing in assisting those left behind to win from the land the precious and bounteous harvests which Providence has given Britain this summer.

As I write, scenes are now being witnessed in the harvest fields the like of which have not been seen in some parts for centuries. They recall the days when everybody used to turn out to gather in the ripened corn. Womenfolk and school children are helping the farmers with a voluntary goodwill that shows the spirit of the old race predominant and determined. True, the Army Council decided to release 27,000 soldiers to assist with the harvest, but it was recognized from the outset that the number of soldiers released represented only a small fraction of the number of men normally employed in the fields at this time of the year.

On farms in the Eastern Counties of England women have proved adept at such occupations as mangel hoeing, weeding, hedge clipping, cleaning ditches, making hay, and, of course, at all phases of dairy work. Many farmers in the South of England have been sceptical as to the value of women's work on the land, but experiences this summer show that even women without previous experience, given some preliminary instruction and a fair trial, can be of great service to the farmer, and that practical proof of their usefulness is breaking down the old prejudices.

On a farm of 500 acres near Coventry, to which eight young women were supplied by the Birmingham Labor Exchange, it was found that at most kinds of farm work three unskilled girls can do the work of two ordinary farm men. The girls, as beginners, received fifteen shillings a week and a share of a cottage, and did their own housework and housekeeping. They side hoed and singled roots, topped and carted them, hoed, lifted and clamped potatoes, helped to thresh, helped with hay and harvest, whitewashed sheds, mended bags, harrowed before and after drilling, cut thistles, and carted manure, and their employer was more than satisfied with their work and their keenness.

The daughter of a country vicar has for over a year been doing all sorts of farm work, including ploughing, on a Warwick farm in a thoroughly satisfactory manner. In another case four well-educated, young women, who are housed in a cottage and do all their own cooking and housekeeping, are engaged in dairy work, which they now do as well as trained men. A large farmer who engaged five women reports that they are doing the dairy work well, and that the calf-rearing is better attended to than ever before. Another farmer with 200 cows, who employed two women as an experiment, is now employing five. In another case three educated girls, all between 17 and 20, do everything for twenty-six cows—milking, feeding, scouring milking utensils, even the "mucking out."