

Horse Will Not Back.

I have had a horse a year. He drives well, but will not back when in a rig of any kind. He backs all right with harness on, when not hitched, but absolutely refuses to back when hitched.

W. A. T.

Ans.—As kindness has apparently failed to teach this horse to back, you will have to try force. Hitch him to some light rig, preferably a cart with long shafts, so that he cannot rear or fall backwards. Put strong harness on. Give him a few lessons with the harness before hitching. Say "back!" sharply, and at the same moment draw quickly and strongly on the lines. By using the word and action at the same time, teach him to connect the action of backing with the word "back" and tension on the lines. Then hitch him, and, while standing on the ground yourself, treat him the same. If he still refuses to back, get an assistant to stand in front of him with a whip, and give him a smart cut on the nose or fore legs when you say "back!" After a few lessons this way, put a little resistance on rig, to teach him to put force on the harness. Gradually increase the load he has to force backwards. This treatment may appear crude, but this is a case in which the horse knows what he is wanted to do, but refuses, and the only means of teaching him is to overcome his stubbornness by force, and, if necessary, punishment.

Watch the mare at foaling time. While in many cases parturition will be accomplished satisfactorily without manual assistance, in some instances a little timely and intelligent human aid may relieve much distress, and possibly save the life of foal or mare, or both. Do not allow her to suspect, or, at any rate, to be conspicuously reminded, of your presence, but be near enough to render assistance, if necessary, at the critical moment. The advantage of such attendance in the exceptional cases when needed, will repay the trouble of making it a rule.

LIVE STOCK.

Young Pig Management.

A hog is half made when past the weaning period without a stunt or kink in its growth. Every check or halt in prosperity through its first two months is more expensive than at any later period. Too much rich, feverish milk of the dam, causing thumps or other ailment, may leave harmful results, perhaps as much so as scant feeding or other neglect of the sow. More injury may be done to a pig's growth in two or three days than can be repaired in a month, even if he is made the subject of special care, which, where many are raised, is not the rule, nor easily practicable. "Good luck" with pigs calls for attention, and that not occasional, but frequent and regular.

From the first week after farrowing, until weaning time, the sow will be little else than a milk machine, and, to be a high-power machine, in perfect operation, she must have proper care. Nothing else is so well calculated to make pigs grow as a bountiful supply of wholesome sow's milk, and the pigs that have plenty of other feed with the milk of a well-slopped sow for eight weeks, will ordinarily have much the start of those weaned at five or six weeks, no matter how much food and attention the earlier-weaned pigs may have had.

At eight or nine weeks old, most pigs are, or, rather, should be, fit to take away from the sow; some litters are individually older at seven weeks than others at ten, and better fitted for weaning. Sometimes it is necessary to wean when pigs are five or six weeks old, and in other cases it may be advisable to wait until the pigs are ten weeks, or even older. In the corn belt the period will generally average longer than in New England. Breeders who wean at early ages generally do so in order to more profitably raise two litters a year.

Provided with and taught to eat suitable feed some weeks beforehand, pigs are not noticeably checked in their growth by weaning, but those that have been dependent mainly upon the mother's milk, when abruptly taken away from it, frequently seem to have their growth partially suspended for weeks. Many breeders successfully let the sow wean her pigs, as she will in time, and the change is so gradual that no pause in growth indicates when the milk diet ceased. A modified application of this, in which the pigs are separated from the sow at an age suiting their feeding and the convenience of the breeder, will not infrequently be found advisable, but by no means should the pigs be allowed to remain with a sow until she is virtually devoured by them, as is sometimes done.

It is not a good plan to take all the pigs from the sow, unless one or two of them can be turned with her some hours after, to draw the milk she will have at that time, and again, say,

after a lapse of 24 hours. The preferred way is to leave about two of the smallest with her for several days, and after that leave only one for two or three days more, by which time the flow of milk will have been so gradually diminished that no injury to the sow will result by keeping them entirely away from her. This extra supply of milk helps, also, to push the smaller pigs along in growth, and put them more nearly on an equality in size with their thriftier mates.—[From Coburn's "Swine in America."

Winter Pig-feeding Experiment.

Editor "The Farmer's Advocate":

I hope that some of your readers may be interested, as I have been, in hog-feeding experiences, I am sending the result of mine, last winter. September 3rd a young sow had litter of five, but, owing to trouble with her milk, raised only three, and these, at weaning were only just good ordinary pigs, weaned at eight or nine weeks old, having run out with mother for about four weeks. The first week in December we carried them into a cement-floored box stall in the cattle stable. Unfortunately, I did not weigh them at this time, but estimated their weight at 65 to 70 pounds. February 4th we weighed the three, weights being 155, 165 and 180, an average of 167 pounds, a net gain in two months of 100 pounds per head. Eleven days later we weighed again, weights being 175, 180 and 201; average, 185 pounds; net gain, 18 pounds per head in 11 days. March 4th sold hogs, total weight being 640 pounds, average 213 pounds, at six months and one day old.

Feed consisted entirely of mixed-grain chop from time of weaning (as raised from a mixture of 1 of barley, 1 of oats, and $\frac{1}{2}$ of peas), with a little extra pea meal added the last month. This was mixed with skim milk or buttermilk and kitchen slop for drink, and two mangels per head per day were fed by way of dessert. The balance sheet shows about as follows:

Nov. 4—Three hogs, at \$2 each.....	\$ 6.00
To Dec. 4.—80 lbs. chop, \$1.00; 15 gallons milk, 30c.....	1.30
Dec. 4 to Feb. 4—450 lbs. chop, at \$1.25 per cwt.	5.63
12 bushels mangels, at 6c. per bush....	.72
1,800 lbs. milk or buttermilk, at 20c....	3.60
Feb. 4 to March 4.—320 lbs. chop, mixed. 120 lbs. pea chop	4.00
850 lbs. milk and buttermilk	1.70
1 bush. mangels	.24
	\$24.69
March 4.—Three hogs, 640 lbs., at \$6.75 per cwt.	\$43.20
Net profit	\$18.51

I have purposely divided the feeding into periods, as it gives a fairly good idea of the relative cost of gains at different stages of growth. The cost of feeding the sow while she was suckling did not exceed \$1.00, which, with \$1.30, cost of first month's keep, makes the 200 pounds live weight made in the first three months worth \$2.65 per cwt. to produce. With an average-sized litter, even this amount would be materially reduced.

First three months, cost of feed, \$2.65 per cwt. of gain.

Fourth and fifth months, cost of feed, \$3.32 per cwt. of gain.

Sixth month, cost of feed, \$5.25 per cwt. of gain.

The average daily gain from the time they were three months old, was 1.67 pounds, and this was constant through the whole period.

Query—Was it necessary to increase the feed as much as I did during the last month, as there was no increase in rate of gain? Or, again, if the skim milk had been increased in same ratio as meal, would the gains have been greater? Probably the last month's feed bill would not have been so heavy. As a matter of fact, the amount of milk and buttermilk was fairly constant from the middle of December to end of feeding, being about one gallon of fresh skim milk from the separator morning and night, and the same amount of buttermilk at noon; if the supply played out, as it did sometimes, water or kitchen slop was substituted. The chop was stirred into the milk, and from the time the pigs could take so much, it was made up to a pailful. This was never exceeded. There was always more or less water used with the milk, either clear or dishwater, as was convenient. Mangels were fed whole, and two each was all they seemed to care for per day; during the last week they hardly ate any. I never gave any sulphur, salt, ashes, earth, or any condiment of any kind. They had no platform to sleep on, just plenty of litter on the cement.

I have fed a good many hogs during the past eight years, usually four litters per year, but I never before had any milk available, beyond, perhaps, a little about weaning time, and this has been a revelation to me, as to its value for pig feed. I have always figured the cost of feeding winter pigs at about 5 cents per pound, using mangels or turnips with the chop. With beet pulp available, I could do a little better; but this was with chop at \$1 per 100 pounds, and it would take eight months to make the weights these hogs made in six. Now, with chop at \$1.25, and milk at 20 cents per cwt., we have made pork at \$3.85 per cwt. in midwinter. Looked at in another way, taking the cost of gains on grain and roots, I figure that skim milk and buttermilk was worth 50 cents per cwt. as a substitute for grain. This adds considerably to the value of a good milk cow, and incidentally makes the raising of calves a good deal more expensive. Average ratio of milk to meal was as 3.33 to 1.

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What Alberta Conditions Demonstrate.

In the matter of wintering stock, Alberta is giving the rest of the Dominion some valuable demonstrations. Somehow, in the past, we became imbued with the notion that, in order to bring stock successfully through the winter, we had to house them in warm quarters and protect them from every breath of wind, which usually involved seclusion from sunshine and denial of exercise. As a result, we provided splendid incubating depots for tuberculosis, developed a pampered, oversensitive class of stock, and largely eliminated natural tendencies to grow thick coats of hair, and resist cold and disease. The dark, unventilated, "comfortable" basement stable is one of the grandest monuments to our ignorance in violating natural laws that we have on record. In Manitoba, says "The Farmer's Advocate," of Winnipeg, we know of a "model" stone stable, 60 x 80, in which one cow has her winter habitat, and in which the owner lost some \$1,000 annually trying to fatten cattle, while less than a mile away enough steers to fill his stable have been contentedly putting on flesh all winter.

With horses, the Sunny Province is giving us as emphatic demonstrations as with cattle. At the recent Calgary Show, the first and second-prize draft teams had wintered on the prairie, and came into the show with their ribs buried in good, firm flesh. From such illustrations we can draw our own conclusions. It is just possible that, had Alberta stock-raisers followed the beaten tracks of the industry, and adhered to the orthodox teaching of the stock-raising fraternity, their reputation as raisers of cattle and horses would be no better than that of the stock-raisers of other districts of the West; but necessity pointed a way, which they were not slow to follow, with the result that the best cattle and horses found on the Western markets come from the ranges. The ill effects of a dark, warm, ill-ventilated stable could counteract the benefits of even Alberta's sunshine, grass and fresh air.

Truth that Refuses to Die.

Replying to an editorial article in Hoard's Dairyman, charging Prof. Thos. Shaw with having held back the development of the dairy industry of Minnesota for years, by poisoning the minds of its farmers with dual-purpose ideas, Prof. Shaw thus states the essence of his teaching:

"I have taught that there are three classes of cattle in this country, and that there always will be a place for these. The first is the straight dairy cow, and the place for this cow is in the dairy, where the dairyman is seeking production only in the line of milk; the second is the straight beef cow, that suckles her calf, as kept under range or semi-range conditions; and the third is the dual-purpose cow, that will give a fair amount of milk, and that will at the same time produce calves that can be profitably grown into beef. The place for this cow is on the arable farm, where the farmer wants to grow some beef, and where it is too costly to grow it from the straight-beef cow. That is what I have always taught. That is what I am teaching now. Will the man who says I am a distributor of poison answer why? Is it not because what he calls poison is truth, which, like all truth, refuses to die."

I have received the knife, and find its quality and appearance just as good and beautiful as that of the first knife I got years ago.

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