

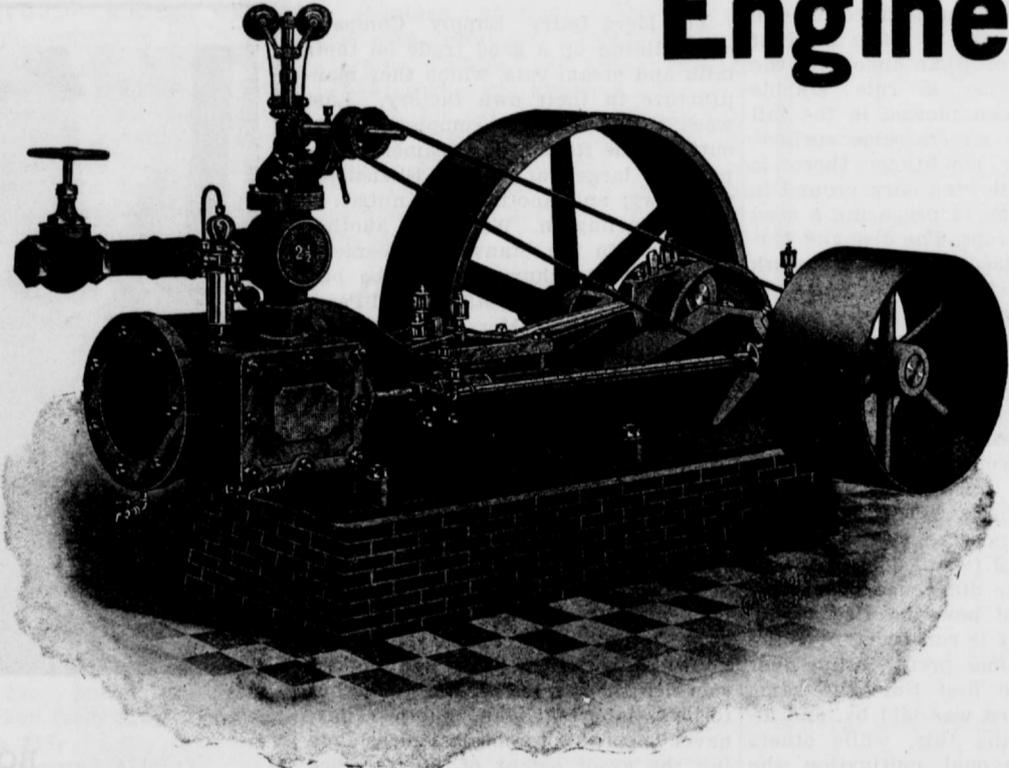
listless and dull, diminution of milk supply, although they are precursors of abortion, are by no means characteristic of it, as in the vast majority of diseases these are the premonitory symptoms first observable; but as abortion approaches the belly falls and the muscles over the rump seem to shrink away, as in case of natural labor. The breathing becomes difficult, sometimes stertorous, and generally the last symptom previous to the act is the discharge of a glairy fluid from the vagina. The last symptom rarely or never deceives, but when observed it is too late to prevent the consequences of the disease. When the former signs are observed means should be adopted at once to prevent, if possible, the impending disaster.

The first step is to remove the cow immediately from her companions, and place her in a dry, comfortable box stall, where she can have no communication with others of the herd, and out of their hearing if possible, and then darken the stall if very light. Administer a pound of Epsom salts dissolved in a quart of warm water, and add two ounces of powdered ginger. This will act gently, and tend to allay any feverish condition. The ginger will warm up the parts internally, and tend to strengthen and give them natural action. When the physic begins to act, give the animal half a dram of powdered opium, which will have upon her a quieting effect, and destroy any disposition to excitement. If she will take food, give her something of a laxative nature, as linseed meal and warm bran mash. By these means the general or local irritation which precedes and sometimes causes abortion may be allayed and the cow go her full time. But the efficacy of these remedies depends to a great extent upon the stage to which the disease has reached. The sooner the disease is recognized and grappled with the more likely are the methods to meet with success.

The causes of abortion are numerous. Among the first must be reckoned fear and excitement, and violent exercise like fast driving, being chased by dogs, and the excitement attendant upon riding others when the latter are in heat. Bad and unsuitable food is a frequent cause, and also impure drinking water. Cows that have been half starved in winter and incautiously turned into rich pasture in the spring, are apt to cast their calves prematurely by reason of the sudden change in the nature of their food affecting their condition, and indirectly their nervous system. Coarse, rank herbage growing on low, marshy land, and damaged hay or other damaged feeds, are exciting causes sometimes. Ergot in grasses, hay and grains are very apt to cause this difficulty, and they should be guarded against sedulously, and it is suspected by some that cottonseed meal may produce the disease if eaten liberally. (Anybody having cause to confirm this belief is requested to write the author of this article and detail his reasons for such belief.) Another cause of some cases is sympathy. Cows during the season of pregnancy are highly irritable and sensitive, and if one of their number has the misfortune to slip her calf, and especially if the foetus is in a state of putrefaction, the smell arising from it seems to be particularly offensive to the other cows, and in a day or two they may follow the example and abort likewise.

It is thus seen that safety from isolated abortion lies only in proper feed, careful handling of the animals, pure

PEERLESS Horizontal Engine



Our horizontal center-crank is a strong, simple, plain engine. The lower slides, the journal boxes, the center of the Cylinder, the cross-head and the crank shaft bearings are in a direct line, thus relieving the studs which hold the upper slides from all strain, and bring the thrust of the crank bearings directly on the engine bed and not on the studs. The cylinder, ways and cross-head are of the modern locomotive pattern, hanging and polished, and in connection with the iron jacket, present a surface always bright, and one that can be easily kept clean. The connecting rods and eccentric rod have adjusting brass boxes.

We justly claim for this Engine large wearing surfaces, durability, great rigidity and strength, extreme simplicity and few parts.

All our engines are run and tested under actual working pressure before shipping, and are known to be in perfect working order.

THIS ENGINE IS ONE OF MANY KINDS WE ARE IN A POSITION TO SUPPLY. LET US KNOW YOUR REQUIREMENTS.

BAKER & HAMILTON, Sacramento, **SAN FRANCISCO, CAL. Los Angeles.**

drinking water, and just such care in every respect as is conducive to the best interests of the cows and their owner's pocketbook.

But there is another variety of abortion which was determined only a few years ago, and this is contagious abortion, due to a living germ. It is so infectious that it sometimes affects all of the herd that are in the right stage of pregnancy to receive it. In this case it is to be treated like the other, but there is little hope of prevention. Drainage and open sunshine are helpful. In cases of contagious abortion, the foetus and afterbirth should be burned or buried in lime, the stable litter be burned, the floor be covered with lime, and the entire stable, including the cow, be thoroughly disinfected. These proceedings are advised in all cases, lest by a possibility they may be cases of contagious abortion.

Don't Part With Skim Milk.

There are several reasons why the patrons of our creameries should not allow their skim milk to be taken from

the farm. Among these reasons we enumerate the following:

1. No creamery proprietor that we have yet known of will pay for skim milk anywhere near what it is worth to feed to young pigs and calves. What is the skim milk worth to the farmer? As a pork-making food at present prices for live hogs it is worth from 25 to 35 cents a hundred pounds, the latter price depending on the young age of the pigs it is fed to. It is worth just as much fed to heifer calves of good dairy blood, or to young beef-bred calves. In both cases they may be fed till they are a year old. The past winter, considering the high price of feed of all kinds, skim milk has been worth several cents more per hundred than usual.
2. Its value as a fertilizer to the farm is 7 cents a hundred.
3. No farmer that is a farmer can afford to sell his skim milk for what the creamery man can afford to pay him.
4. The demand for casein is very limited and there are already signs of a glutted market, while the prospects

for pork, beef and likely dairy bred calves and young stock are as good as ever.

We always take it as a sure sign that the patrons of a creamery do not know the full meaning of dairy farming or understand how to bring out the best profits when we see them selling their skim milk to be taken from the farm. A shallow-reasoning farmer may be caught that way, but not one who knows his business as a dairy farmer ought to know it.—Hoard's Dairyman.

AHEAD OF ALL OTHERS.

A prominent breeder and feeder on writing to the Prussian Remedy Co. of St. Paul, Minn., says:

"I have been using your Prussian Stock Food for horses and cattle. I have used a great many others for the past forty years, but I can truthfully say I have had more satisfaction from yours than any other. I think it stands A1 in advance of all others.

"ISAAC CASSADY, Orleans, Mich."

Success is the realization of the estimate which you place upon yourself.