with the other systems. The individual readings for all factors observed, together with a description of the experiment in detail, will be found in the annual report of the C. E. F.

In summing up what can be gleaned from these averages and from the recorded readings from which the averages were computed, we cannot regard the muslin-curtain system as measuring up scientifically to the requirements of even a fairly effective system of ventilation. It is irregular and uncertain in action, and inferior to both against which it has been tested. The comparison is a fair one, for in each case the same stables were ventilated by the systems with which it is compared, all other conditions being equal. On the other hand, a comparison of the Massey and King systems from these data would not be fair, for they were tested in different stables, under different conditions of elevation, exposure and stable structure, with different amounts of stable room per head of stock, the one for a mixed herd of growing and fattening cattle, and the other for a herd of milch cows, for which a higher temperature is usually desired; and, lastly, under the control of and adjusted by different herdsmen.

In conclusion, I might say that several interesting questions, some of which have doubtless occurred to the reader, have been suggested by the work done, to answer which Messrs. Sirett and Duff hope to continue their work for a sufficient time during the present winter. WM. H. DAY.

Treatment for Worms in Sheep.

The danger of treating sheep with medicine was impressed by Dr. J. Hugo Reed, in discussing the cause, prevention and treatment of diseases in sheep, at the Provincial Winter Fair, at Guelph. This class of stock differed from others in their response to care and feeding, he said. Not more than half an ounce should be allowed to enter the throat until it was certain the sheep swallowed.

His experience was that sheep were bothered more by tapeworm than by other kinds of worm. Sheep pasturing on swampy or low ground, particularly on land on which hounds had been hunting the previous season, were frequently affected. This was due to the fact that segments of the same worm were dropped by the dogs, and remained over winter, and entered the sheep with grass in spring.

Administration of turpentine, gasoline or benzine were common doses. The animal should have nothing to eat for 12 to 18 hours previous to a 2 to 4 dram dose (depending on size of sheep) of turpentine in sweet milk, one of the former to seven or ten of the latter. Then keep food removed and the animals confined for a few hours. Another successful remedy was said to be pumpkin seed. Break the seed, boil in water, and allow to simmer for several hours. Each animal should get the product of from two to four ounces of pumpkin seed. It was wise always to repeat treatment after about 10 or 12 days.

Round worms or stomach worms could be treated much the same way. Symptoms were general unthriftiness. Treatment was the same as for tapeworms, excepting that pumpkin seed was not effective.

As to grub in the head, Dr. Reed thought a large percentage of loss was due to this ailment. It was caused by the gadfly depositing an egg in the nostril of the sheep. Respiration resulted in this being worked into sinuses in the mucous membrane of the head, and soon the larvæ developed into little grubs, and caused an irritation. Methods of treatment were not satisfactory. Some recommended fumigating by burning sulphur. The objection to this treatment was that all grubs, when dead, were not removed, and they continued to cause irritation. Dosing by syringe with 1 of turpentine to 15 or 16 of sweet milk, also was advocated. There was a danger of the mixture going to the lungs.

Prevention, by housing during heat of day in fly time, or by daubing the nostrils of the sheep and the salt boxes with tar, was, however, much better than cure.

As a cure for stomach worms, John Campbell, of Woodville, said he used to give seed of male-fern, but now he made use of turpentine. Epsom salts was pronounced as the best sheep medicine he knew. Four ounces to a dose, with a little ginger, was an excellent medicine.

Professor Day said his experience showed little trouble with worms, if sheep were put on fresh grass every season.

In reply, Mr. Campbell said the old pasture along roadsides was the very best for sheep.

Professor Day cited an instance of where a flock had been troubled with tapeworms for years, and since the practice of keeping them on fresh seeding every season had been followed, there was absolutely no trouble.

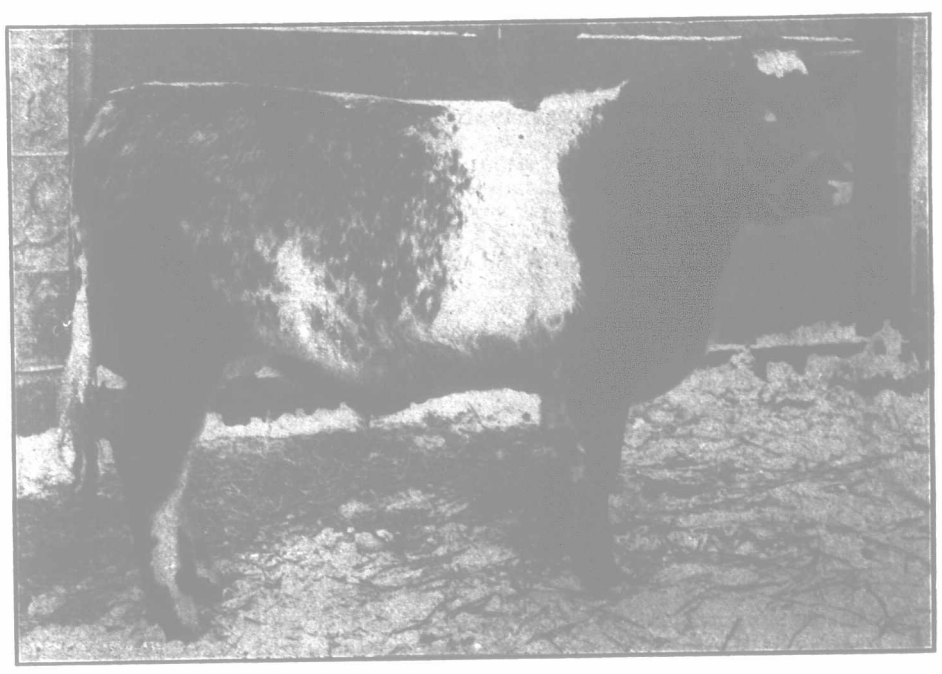
Baby Beef Sells Well.

Editor "The Farmer's Advocate":

In reply to your inquiry concerning the 150 cattle which I shipped from Mitchell on the 8th of December, I may say they were bred and raised in the vicinity of Mitchell, in South Perth, Ont. The majority of them were Shorthorns and Shorthorn grades. I shipped quite a few yearlings weighing from 900 to 1,000 pounds each, which sold at good prices. That kind of cattle sells well, and is termed baby beef. The whole shipment averaged 1,150 pounds each. The cattle were all tied in stables, and fed with a ration of roots or silage, with cut feed (I prefer oat sheaves to straw and hay), and from two to three gallons of meal daily, and a feed of hay, just what the animal may require. I may just mention here that farmers in this section are sowing mixed grain for feeding purposes—oats, barley, peas and goose wheat—and the results are very satisfactory, as the yield is about ten bushels to the acre more than from sowing each kind separate, and it is all ready mixed for grinding.

We shipped about the same number of cattle for the Christmas market as we did last year from Mitchell. And, as for number and price of cattle, for the coming year, I don't think there will be any material change from the present.

Perth Co., Ont. WM. PRIDHAM.



Dunrobin Villager.

Pure-bred Shorthorn steer; born September 2nd, 1907. First in class under one year, and champion Shorthorn over all ages, at Ontario Provincial Winter Fair, Guelph, 1908. Bred and exhibited by Donald Gunn & Son, Beaverton, Ont.

Pure-bred Cotswold Ewe Lambs.

Winners of first prize, single, and for pen of three, at Ontario Provincial Winter Fair, Guelph, 1908. Exhibited by E. Brien & Sons, Ridgetown, Ont.

A Book for One New Name.

For one new name, accompanied by $1.50, any present subscriber to "The Farmer's Advocate" may obtain a copy of Prof. F. H. King's most excellent new book on ventilation. The retail price of this work is 75 cents, and it is rare value at the price, but a specially favorable discount rate from the publisher enables us to offer it as a premium for one new name.

Unique Journalism.

I have received the Christmas number of "The Farmer's Advocate and Home Magazine." It is unique in the field of agricultural journalism.

Wisconsin, U. S. A. F. A. STROSCHEIN.

THE FARM.

Water System for Farmers.

Not many years ago, the only way of getting a supply of water for stock, and use in the house, was by hand pumping. Modern progress along all lines demands that the old way has served its day and generation; hence, many farmers have been installing the various systems in use, and others have the matter under consideration. There is no reason why farmers cannot have a good supply of water always available, just as well as city people. The great advantage and convenience of having running water in the house and barn, permitting the installation of modern conveniences can hardly be overestimated. We will consider just a few of the many devices that can be used for pumping water.

The hydraulic ram has been and is being used to good advantage, and is a cheap means of securing a supply of water at any desired place, where an ample source of running water is always assured, and favorably situated.

The windmill, too, has its host of admirers, as is evinced by the many to be seen all over the country.

The gasoline engine has its advantages and objections.

A year ago, when we wished to instal a water system, I gave the matter careful consideration, and will give you the results of my investigation for what it may be worth. I did not have an available source of water sufficient for an hydraulic ram. The pros and cons of the windmill were carefully considered. I decided a large tank would be necessary to insure a supply of water during a long calm, or some means would need to be devised of raising the wind when the supply ran low. I have not yet learned that scientists have been able to cope with the wind, or the contract would have been let at once for the wind to do the work.

The gasoline engine we find very useful on a farm for sawing wood, cutting fodder, running a spray pump, etc.

When it comes to pumping water, the hot-air engine seems to be just the right thing in the right place. It is simply constructed, perfectly safe—no explosion; always ready on short notice; can be started and operated by a child; not expensive to run, as it takes very little fuel. There are places where it could not be installed satisfactorily. It will, however, force or shove water up any reasonable height. Conditions vary. What is adapted for one place may not prove satisfactory at another. It is entirely satisfactory, and it is a source of pleasure to have a good supply of running water always on hand through the house to supply the kitchen, baths and toilets, as well as the barn.

We have the engine in the basement of the house adjoining the furnace, so that when the furnace is in use, it makes it convenient to fire up in the engine. The engine pumps the water from a well fifty feet away into a pneumatic, steel, air-tight tank, located, also, in the basement near the engine. This circular tank is three feet in diameter, ten feet long, and is placed horizontally, and holds five hundred gallons. The water enters the tank at the bottom, and, as the tank is being filled, the air having no means of escape, is being compressed, so that when it is half full of water the gauge on the tank would show a pressure of 15 pounds, or a pressure probably