

plainly, stockmen are BREEDING TUBERCULOSIS a great deal faster through neglect of this important subject of ventilation than it would ever be possible to stamp it out by the promiscuous use of tuberculin and the slaughter of diseased animals.

**OPEN-AIR TREATMENT OF A TUBERCULOUS HERD.**

I may be pardoned if, while on this subject, I refer briefly to an experiment which I have been carrying on for the last three years. A herd of forty-three (43) cattle, twenty-one (21) being dairy cows, twenty-eight of which had reacted to tuberculin, the remaining fifteen being apparently free from disease, has been kept under open-air conditions since the fall of 1905. The objects of this experiment, which is of a purely practical nature, are threefold: firstly, to ascertain the effect of open-air treatment upon the diseased cattle themselves; secondly, to ascertain to what extent healthy cattle, kept in contact with diseased cattle, under open-air conditions, are subject to infection; thirdly, to ascertain what percentage of healthy calves it is possible to rear from diseased cows, kept without any precautions under open-air conditions. The experiment is not yet concluded, nor have its results been properly tabulated for publication. I may say, however, that of the 28 reactors, only one has broken down from generalized tuberculosis during the three years which have elapsed since the experiment began. One other has been killed, owing to tuberculosis of the udder. Of the healthy animals kept in contact with them, feeding from the same racks, grazing over the same ground, drinking from the same pool, not a single one has become affected, and this in spite of the fact that from time to time animals suffering from acute, generalized tuberculosis have been introduced to the herd, and allowed to mix freely with its original members.

The results in the rearing of healthy calves, however, remind one somewhat of the Irishman's pigs, which, you will recollect, when killed, did not weigh as much as he expected, and he never thought they would. Of the calves dropped and reared by reacting cows, seventy-five per cent. have so far entirely failed to react, while twenty-five per cent. have reacted, at various ages, ranging from four months to one year. One calf died at six weeks old from generalized tuberculosis, this case being probably congenital.

The results of the various tests of the original reactors, made at intervals of about six months, and in the last case after a lapse of twelve months, are exceedingly interesting, and will, when published, together with the post-mortem notes, merit the careful perusal of those who believe in the absolute reliability of tuberculin as a diagnostic agent.

I might add that the cattle have had no shelter but open sheds, and have, with the exception of a few of the weaker individuals, been fed nothing but hay for the three winters during which they have been under observation.

It should be mentioned that, through an error in judgment on the part of an over-zealous herdsman during the first winter, our calves began to arrive in December of 1906, the first being dropped when the thermometer was 29 below zero, the others following at intervals, sometimes very short, until the middle of March, 1907, and that, in spite of this, both dams and progeny thrive well in the open air.

The results are very interesting, in view of the present tendency to consider the digestive tract the most frequent and certain channel of infection. While the experiment above outlined assists in proving that young animals can be and are most frequently infected through the digestive system, it also, to my mind, shows that, in the case of adults, infection through the air passages plays an important part.

I feel satisfied, and I think all practical men will agree, that had the healthy cattle in this experiment been kept under ordinary stable conditions with their diseased companions they would not have escaped as they have done.

**GET CLOSER TO NATURE.**

The highest medical authorities are nowadays advising—and with the very best possible results—our modern hot-

house humanity to get "closer to nature" in every possible way. The advantages of adopting a similar policy in the handling and housing of domestic animals are too apparent to admit of discussion. Nature has furnished our animal friends with every conceivable requisite for protection against ordinary climatic conditions, and most of the diseases and disabilities to which they are subject have been caused by and owe their continuance to the irrational artificial conditions imposed upon them by well-meaning but ignorant, or, rather, unthinking owners and attendants.

I am here, however, to learn, and not to teach. The problem of the control of bovine tuberculosis is undoubtedly the most serious confronting the veterinary sanitarian of to-day, and if the labors of this section of the International Congress result in its solution, I for one will be forever grateful.

**GOSSIP.**

**WILLOWBANK HORNED DORSETS.**

The unqualified success in the show-rings at Toronto, London, Ottawa, Sherbrooke and Chicago, of the Willowbank Flock of imported and Canadian-bred Horned Dorset sheep, the property of Messrs. James Robertson & Sons, of Milton, Ont., is proof-positive that they have no superiors as a flock of high-class show sheep in Canada—a tribute to the excellent judgment of the Messrs. Robertson in the selection of breeding stock, and to their skill as expert feeders and fitters. The flock is now about seventy strong, the greater number of them imported. For sale just now is a bunch of imported shearing ewes, bred to this year's Toronto and London champion ram; also a pair of three-shear imported ewes, bred to the same ram. This is a very choice pair of show ewes. Besides these there are a number of Canadian-bred ewes for sale. In youngsters, there are 12 ewe lambs, six of them out of imported ewes, and all of them got by last year's grand champion all around the circuit, Imp. Romulus 2nd, said to be the best ram of the breed ever imported. In rams for sale, there are several shearings, imported and Canadian-bred, and three ram lambs sired by Homestead H., the ram that in 1906 headed the first-prize Canadian-bred flock at Toronto. Without doubt, this is the choicest offering of Dorset sheep in Canada, and parties wanting anything in that line would do well to look them up. Parties from a distance may place perfect confidence in whatever Mr. Robertson says about his sheep, as he represents things exactly as they are. This fall the flock won the highest honors, including the open flock prize, wherever shown.

**LAST CALL FOR THE GUELPH SALE.**

In last week's issue was a short synopsis of the excellent breeding of the twenty-eight head of Scotch Shorthorns to be sold at the Winter Fair Building, in Guelph, on Wednesday, November 4th, 1908. The seven young bulls to be sold are a really good lot, some of them bred on show lines, and bred fit to head any herd. One of them, an English Lady, is sired by that excellent, big, thick bull and splendid sire, Imp. Pride of Scotland. Another, a Crutskhank Belona, is sired by one of the greatest sires in Canada, Imp. Scottish Hero, and his dam is also imported. The others are all sired by the Lavender-bred bull, Trout Creek Wonder, a bull that is not only a choice individual, but is proving a capital sire, on blood lines. One is a double-cross Missie, another a Village-bred, another a Princess Fairy, another a Roan Lady, and the other a Cinderella. The females, in age, are: Two four years old, six two years old, and thirteen one year old. Among them are several likely candidates for show honors. All are a big, good lot of the thick-fleshed, good-doing sort, bred on the most fashionable lines, some of them already prizewinners, and nearly all eligible for registration in the American Herdbook. Without doubt, this will be one of the very best offerings for sale this year, and should be a drawing-card to all breeders interested in Shorthorns from both sides of the line.

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Write for prices to:

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506-507 Manning Chambers, Toronto, Ontario.

**Shropshires, Cotswolds Oxford Down Sheep**

I am now offering a lot of large, well-covered rams. They weigh from 160 to 200 lbs. each. Also shearing ewes, ram lambs and ewe lambs, of both breeds, fitted for showing.  
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**AT FARNHAM FARM.**  
We are at present offering a number of superior yearling rams and ram lambs, by imported sire and partly from imported dams. Some splendid yearling ewes and ewe lambs. Also a few imported yearling and ram lambs. Price reasonable.  
**Henry Arkell & Son, Arkell, Ontario.**  
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A large number of extra good Shropshire and Cotswold ewes, twelve months old. And a few very high-class Shorthorn bulls and heifers. Any of which will be sold at moderate prices.  
**ROBERT MILLER, STOUFFVILLE, ONT.**

**IMPORTED HORNED DORSETS**  
My importation for 1908 will arrive in a few days. Look me up at Toronto Exhibition. I have for sale a few of both sexes, the get of last year's champion all round the circuit, Imp. Romulus 2nd. Canada's banner flock of Dorsets. **JAS. ROBERTSON & SONS, MILTON P.O. and Sta., C.P.R. and G.T.R.**

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Yearling rams and yearling ewes. All bred from imp. sire and dams. Price reasonable.  
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Long-distance Telephone.

10 good yearling rams, including the first and third prize winners at London. Also some good breeding ewes, which must be sold, as the flock is being reduced.  
**ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont.**

**SUNNYMOUNT BERKSHIRES**  
Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand good lot. Also younger ones. Pairs not akin. **JOHN McLEOD, C.P.R. & G.T.R. Wilton P.O., Ont.**

**Willowdale Berkshires!**  
Won the leading honors at Toronto this fall. For sale are both sexes and all ages, from imp. stock on both sides. Show things a specialty. Everything guaranteed as represented. **J. J. WILSON, MILTON, ONT., P. O. AND STATION. C. P. R. AND G. T. R.**

**CHESTER WHITE SWINE AND SHROPSHIRE SHEEP.**  
Write for prices.  
**W. E. WRIGHT, GLANWORTH, ONTARIO.**

**Maple Villa Oxford Downs and Yorkshires**  
For sale: Sunset, imp., 2 yrs. old—a grand ram and a grand, good sire; 15 shearing ewes; 4 shearing rams; this year's lambs of both sexes. A high-class lot. Yorkshires of both sexes and all ages. Satisfaction is guaranteed. **J. A. Gerswell, Bond Head P. O., Ont. Beeton or Bradford Sta.**

**MONKLAND YORKSHIRES**  
are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now.  
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25 one and two shear ewes, 3 shearing rams, and this year's crop of ram lambs. Also sows in pig, and sows ready to breed; boars fit for service, and pigs ready to wean. **Mac Campbell & Sons, Norwich, Ont.**

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**ELMFIELD YORKSHIRES**  
50 young pigs for sale, both sexes. Young sows bred to imported boar, also sows to Canadian-bred boar due to farrow about 1st October. **G. B. Muma, Ayr, Ont. Ayr, C.P.R.; Paris, G.T.R.**