Those Mysterious Barn Fires

THE frequent recurrence of barn fires in Western Ontario have caused intense excitement in the district, and much speculation as to their probable cause. On Nov. 14, Dereham township, Oxford county, reported its second fire within 16 hours, the loss for the two being $9,000. Of the causes to which the fires had been attributed, incendiarism and spontaneous combustion, have become widely accepted in the popular belief. The belief that incendiarism is largely responsible is gaining wider acceptance and has been greatly strengthened by the fact that most of the fires have occurred in one section of the province. It is felt by many that were the fires due to spontaneous combustion they would be more generally distributed throughout Ontario and Quebec, since conditions at haying and harvest time were fairly uniform over the two provinces. If, therefore the condition in which the hay or grain went into the barn would result in fire breaking out spontaneously, they should not be restricted to one part of Ontario.

With a view to securing, if possible, a scientific explanation of the causes of the fire, Prof. W. H. Day, Professor of Physics at the O.A.C., Guelph, was recently interviewed by an editor of Farm and Dairy. Prof. Day had only recently been appointed to investigate the causes of the fire. "It is now generally recognized," said the professor, "that there is such a thing as spontaneous combustion and that barn fires have originated from this cause. Certainly the conditions this year are favorable to spontaneous combustion. Haying weather was very unfavorable and in many cases the hay went into the barn in a very wet condition. So far I have not commenced the investigation, but I have received one letter from a farmer in Haldimand county in which he states that his hay went in perfectly dry. In this case some other cause than spontaneous combustion would have to be looked for."

It is the purpose of the government to thoroughly investigate the causes of the fires, and it is hoped that by collecting evidence and submitting it to scientific scrutiny, at least the approximate cause of most of the fires will be determined and the mystery cleared up. In the meantime the farmers in the districts where fires have been most prevalent are awaiting with intense eagerness the solution of a problem which so nearly affects their interests.

Determining Sex

By J. G. Lochart.

A LOT of nonsense is still heard about the possibility of determining sex. Those who formulate simple rules for sex control seem to overlook the fact that the great scientists with the accumulated knowledge of centuries at their command, have not been able to solve the problem of sex control. If they had been able to solve it, their success would have been heralded throughout the world and the principles of their discovery applied to practical use. The eldest children of all aristocratic families would invariably be boys. The laws would also be made use of by breeders of pure bred animals and the proportion of the sexes would be made to conform to market demands.

Something, however, is known regarding the means by which the proportion of the sexes is kept constant, or nearly so. At some stage in development the determination of sex is left entirely to chance. It is for this reason that the balance is so nearly kept. Throw up a coin a half dozen times and it may be that the heads will come up the six times in succession, but keep at it long enough, and the time will come when heads and tails have come up an equal number of times. This may even occur several times during the first hundred tosses. The same law applies in breeding or in anything else, when two alternatives are left entirely to chance. The tendency is to balance up. At some time during the fertilization process this is what happens in sex determination. It is thereby provided that the proportion of the sexes shall always be maintained as about equal, and that the determination of sex shall always be beyond the control of outside influences.

Making the New Cow Feel at Home

A. J. Mulligan, Essex Co., Ont.

NOW that auction sales are becoming the order of the day, many dairy farmers will be introducing new cows into their herds. For a while after arriving the new purchases may show indications of falling off in the milk flow. This will continue until she has become fully accustomed to her new surroundings and she can be greatly assisted in becoming so accustomed by careful handling until she feels at home.

Upon arriving at her destination the new cow should be placed in a stall by herself, preferably a box stall, so that she will not be able to see strange cattle. If more than one have been secured and they have been previously acquainted, it will be best to place them in each other's company. For a day or two the new cow should be carefully attended and well fed, after which she may be turned out with some of the other dairy cattle, preferably quiet, peaceable cows, and not such as will boss her around, for cows, like boys, are apt to pick on strangers until they see what kind of stuff they are made of. When she has become acquainted she may be placed in her permanent stall. There is always some difficulty in getting her into it at first, but after a few times she gets to know it. Here, in full view of all the other cattle, she is sure to soon forget her old attachments and to feel entirely at home.

Testing the New Cow Out.

Unless a recently purchased cow has been previously known by the buyer, a case which seldom happens, it will be necessary for him to become acquainted with her in order to find out the feed and treatment she requires and the production of which she is capable. Each cow requires special study. Her likes and dislikes must be known if the most is to be made of her. If it is known what she has been fed previously to changing hands, it is well to keep her on the same feed for a while, and to change her to the feeds ordinarily fed on the farm gradually. After becoming accustomed to her new feed, her capacity may be found by working her up and noting when she responds best to the feeds given her. She should be kept at the point, not of maximum production, but of profitable production. If she fails to give a good account of herself when tried out by means of the Babcock test and the scales, sell her. This may have been the reason that her previous owner did.

Dressing Percentages

By Prof. W. H. Peters.

THE average dressing percentage of hogs is 75, while of cattle it is 53, and of sheep 48. Part of this difference is due to the method of figuring. In the case of the hog, the hide, head and feet are included in the carcass weight, while in the case of cattle and sheep, the head, hide and feet are not included. Then the hog is very thick fleshed and has a small digestive system. Cattle and sheep have large paunches and digestive systems. Sheep dress out lowest due to the wool and the rather light fleshing of the carcass.

The dressing percentage of animals of each class varies widely. This is due to the amount of flesh, especially fat present on the carcass and somewhat to the thickness of the hide and size of the heads and legs, and to the amount of fill or the amount of feed and water present in the digestive tract at the time of slaughtering. For the hogs the dressing percentage varies from 65 to 85 per cent., with an average of 75. For cattle it ranges from 48 to 70 per cent., with an average of 53, and for sheep from 44 to 56 per cent., with an average of 48 per cent.