

transportation of wheat from the West would be largely overcome if the government would spend some millions of dollars in building and operating lines of wheat freighters which would guarantee to the farmers of the West that their wheat would be carried to the markets of the world at the lowest possible cost. Not only would we be justified in doing that by reason of the benefit that would accrue to the growers of wheat in the West, but it would necessarily mean that instead of about forty per cent. of our surplus wheat leaving Canada by Canadian ports and the other sixty per cent. via American ports, a very much larger proportion would go over Canadian railways thru Canadian ports."

This view was also supported by W. F. Carroll, of Cape Breton. Mr. Carroll referred to the fact that the government is now operating a line of railway from Winnipeg to the Atlantic seaport. Why should they not, he asked, as an auxiliary to their railways, build and own and control ships in this country? He was against the government assisting the Canadian interests to purchase foreign ships, because it is desirable to establish a great ship building industry in this country.

Bank Loans on Livestock

At Thursday's sitting Sir Thomas White secured the passage of a resolution and introduced a bill extending the power of the banks in making loans to farmers. He said that last year the Bank Act was amended by providing that banks might make loans upon the security of "grain purchased, the crops to be grown therefrom, and the seed threshed from the crops." The time was limited practically to last year. The legislation he said had given some satisfaction. It was now proposed to take away the time limit. An additional provision was one which will permit banks to take security for loans to farmers upon livestock. The bill will enable banks to take chattel mortgages for loans on livestock according to the laws of the various provinces. That is to say, said Sir Thomas, that a bank is put in precisely the same position as an individual or an institution that has the power to loan upon chattel mortgage or bill of sale security.

W. A. Buchanan, of Medicine Hat, said that the existing banking system was decidedly unpopular in his district, more particularly with Americans who had been used to a system of local or state banks. With such banks farmers could secure small loans on chattel mortgages. A great many essays and lectures, he said, were delivered by the managers of banks to the farmers as to how they should farm their land and the desirability of going into mixed farming. Those very bankers, however, were the men who refused to permit the farmer to go into mixed farming. Mr. Buchanan thought that there would have to be a change in the method of the management of the banks before the western farmer was satisfied.

Shell Committee Under Fire

Parliament has not heard the last of the shell question. It will be recalled that the operations of the old shell committee were discussed at length in connection with the debate on the address. On that occasion, however, no formal motion was made by the opposition, for the reason that an amendment to the address constitutes a want of confidence vote in the government. On the day after the resolution extending the life of parliament was passed, Sir Wilfrid Laurier gave notice of a motion calling for the appointment of a special committee of the house to investigate the shell committee. A sharp debate is expected when the matter comes up, and there may possibly be a division. It is not expected that the request will be acceded to, and the government will probably again make the plea that the shell committee being an Imperial body, its work does not come properly within the purview of the Dominion parliament.

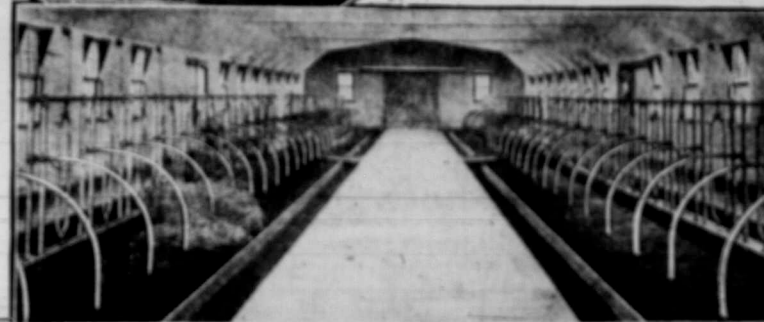
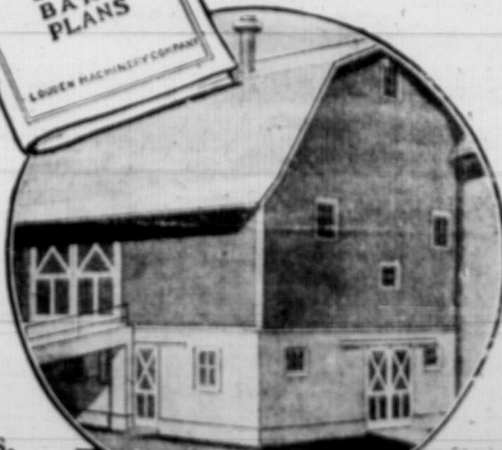
Altho the great fire occurred only a week ago, both the senate and the commons are fairly well established in their new home in the Victoria National Museum. Carpenters are still at work dividing off rooms and there is considerable confusion, but in the course of a few days normal conditions will be restored. The building lends itself to its new purpose to a greater degree than

Do Not Delay

Write for it to-day

Also ask for our catalogues illustrating a complete line of

Hay Carriers,
Litter Carriers,
Steel Stalls,
Stanchions,
Pens and Mangers,
Horse Stable
Equipment and
Barn Door
Hangers



This Valuable Book FREE!

112 pages of valuable information for the man who intends to build or remodel a barn.

18 pages of general instruction on barn construction.

78 pages of barn plans and designs.

6 pages on ventilation.

10 pages on barn equipment.

Do not fail to get this book of reference and instruction on barn construction.

Write to:

LOUDEN MACHINERY CO.

21 Crimea Street, GUELPH, ONT.

BRANCHES:
WINNIPEG, MAN. ST. JOHN, N.B.
VANCOUVER, B.C.

was expected. It is a modern structure with large, airy rooms, and promises to become more popular with the members than the old fashioned structure destroyed by the fire.

OVERDOSE OF FORMALIN

In the season of 1914 I had quite a lot of smut in my wheat, and when I shipped it it graded smutty, therefore being a straight loss of about ten cents per bushel. I decided it did not pay to have any smut and determined to have none in the 1915 crop. I had three hundred acres of land for wheat, all summer-fallow except sixty-five acres, and on this land I sowed 790 bushels by weight of good clean Marquis wheat, which was grown on new breaking by a neighboring farmer. I got twenty-five pounds of formalin and used it on this amount of wheat, thinking I would sure have no smut. Well, I had no smut I can assure you, for the solution was so strong it killed the germ in about two-thirds of the kernels. This I am positive of, for after other people's grain was all up and looked fine, mine was a thin, sickly crop. So I examined the seed in the ground and found that a great many of the grains had never sprouted, and upon squeezing them they were soggy and rotten. Therefore I know I used too much formalin, as my neighbor whom I got the grain from had a dandy crop from seed out of the same bin, his grain averaging forty-five bushels per acre and mine going twenty-three and one-half.

"A WISER MAN."

The proper amount of formalin to use when treating grain for smut is one pound to forty gallons of water. When buying be sure that the solution is fresh.—Ed.

One effect of the war has been to put new life into cheese making in Manitoba. For a number of years this industry has been on the decline, until in 1913 only 499,000 pounds were made in the province. The war, however, with its big demand for so highly nitrogenous a food, furnished an excellent market for eastern cheese, and the Manitoba factories seizing the opportunity to supply the home trade almost doubled their make, producing, according to the department of agriculture's crop report, 726,725 pounds during 1915.

HEREDITY

The laws of heredity are a continual puzzle to breeders of livestock and the oft-quoted maxim that "like produces like" does not always appear to come true. Possibly a slight alteration would be an improvement—like produces like only from like. Not only must sire and dam be of the same type but their ancestry must be of the same type, too. "Throwing back," that bug-bear of the crossbreeder has never been fully explained altho Mendel's researches and discoveries have brought much light to the subject. This breeding back is undoubtedly due to some powerful ancestral influence. Many apparent freaks and "sports" in both animal and vegetable kingdoms are doubtless due to reversion or atavism. Dr. de Vries has found that plants appear at long and irregular intervals that have distinct differences from their parents, and that these new characters are permanent. Hence a new species is established. This is almost a new theory as to the way in which evolution proceeds. Very few plants have been noticed to change in this manner and much study is needed before the theory can be fully established. Variation from type is also brought about in a way not often considered in the present day.

Imitate Surroundings

It is a well-known fact that animals mimic in the color of their coats their natural surroundings. This mimicry is thought to have taken years and ages to accomplish; was only produced by a long course of selection in which animals that had not this protecting mimicry were killed off by their enemies. Jacob knew better than this four thousand years ago, and surrounding his breeding places with striped and mottled fences and posts he quickly produced striped and speckled animals in his flocks. Doubtless he knew that "nervous impression" produced on the female at the first service, aided nature considerably in her mimicry. Scientists call this phenomenon *Telephony* and it is still a force breeders have to meet, as the trite old text says, "unto the third and fourth generation." Climate is also responsible for many variations from the law of heredity. The changes from this cause are certainly very gradual and not much noticed in one generation, we find in every country this adaptation to surrounding circum-

stances producing a difference in type. Cold stimulates the growth of hair till it becomes thick and woolly as in the Iceland ponies. The rocky mountains of Scotland and Wales have produced the hard flint-like hogues of the mountain ponies found in these countries, just as the lowlands have produced the heavy wide-soled draught horses. Rough treatment and fright can hardly be considered a part of nature's great purpose, but they make their influence felt none the less on the young as yet unborn. S. J. Wigley.

CARE OF TIRES

Automobile tires, like machines, should receive some attention and care before they reach the point of "laying down on the job." A little care in looking over a machine occasionally will prevent trouble, so will a close examination of tires while they are still in good condition enable one to prevent much of the trouble to which tires are heir.

The proper use of the extra or "spare" tire, which every motorist should carry, will enable him to make such examinations and repairs at the proper time. At regular intervals the extra tire should be used to replace one of the service tires and the one removed should be gone over immediately. All cuts, cracks and breaks should be sealed by vulcanizing and the weak places reinforced. According to "Motor," if a car is in constant service, one tire exchange per week and in rotation will enable one to keep all the tires in as good condition as possible. Of course this period depends upon the driver and condition of the roads travelled. By this arrangement, the extra tire will be kept in good repair for emergency calls with the emergencies reduced to a minimum and in most cases the tire mileage will be almost doubled.—A. Cammack, Colorado Agricultural College.

NOR GOOD LOOKS

Little Lillian's father, by any stretch of imagination, could not be called good looking, and one day, after gazing intently at him, she turned to her mother and propounded the query: "Mamma, why did you marry papa?" "Because I loved him, dear," was the reply. Lillian looked surprised. "Love will make us women do anything, won't it, mamma?" she said.