

middle. The light is then on the "business end" of the cow, where most needed. The most convenient width for such a barn is 30 feet.

Mangers are best made of cement in the form of a continuous manger. This type is easiest to keep clean. Metal partitions, which can be raised or lowered, are sometimes used to keep each cow's food separate. The manger should be at least 2 feet wide, and the bottom should be raised about 2 inches higher than the cow's platform. Otherwise the cow strains to reach the food.

The length of the platform on which the cow stands varies from $4\frac{1}{2}$ feet for Jerseys to 5 feet for Holsteins. Most makes of sanitary stanchions have devices for adjusting according to the size of the cow. The object is to keep the animal's hind feet at the edge of the gutter, so that no manure drops on the platform.



Interior of Mr. Robert Kelly's barn near New Westminster, B.C. A good barn, but too expensive for most farmers. The essentials are: Lots of light, good ventilation, convenience, and a well-laid concrete floor.

MANURE.

The actual value in increased crops of the manure from one cow is at least \$24 per year. Barnyard manure gives a return of about \$2 per ton when applied to the soil. The total amount—liquid and solid—excreted by a cow in a year is about 12 tons. Mixed with bedding, this is increased to 14 or 15 tons.

It is important to remember that most of the fertilizing value is in the liquid manure. The solids hold most of the phosphoric acid, but the liquid manure contains half the nitrogen and three-quarters of the potash. A great waste occurs in the loss of most of the liquid manure.

HANDLING THE MANURE.

One way of conserving the liquid is to use enough litter to soak it up. Another method is to drain all the liquid manure into a water-tight cistern. If the cistern is built into the side of a hill it facilitates emptying and distributing.