

period, about \$400,000, and the charge at the present time for the interest and sinking fund of the Toronto debt is fully \$500,000. Alderman Turner's speech is well worthy of the perusal and attention of our city financiers. His object is to show the rapid increase in the debt, and the absolute necessity that exists for limiting the borrowing powers of the corporation. Alderman Turner's proposition is to consolidate the debt, and after making provision for certain anticipated demands, which will increase it to \$7,500,000, to make that the limit of the general debt; further outlay for local improvements, such as sewers, roads, sidewalks, &c., being provided for by local improvement rates, leviable on the property in the streets benefited thereby. In order to satisfy the owners of property in new streets, Alderman Turner proposes to appropriate \$500,000 of the new loan to the improvement of streets which have not yet participated in the street expenditure, and he likewise provides \$400,000 for possible railway bonuses, \$150,000 for an exhibition building, and \$250,000 for a main sewer in front of the city. The government debt will thus be raised to about \$7,500,000, which is to be the amount of the new consolidated debt, and this is to be raised by the issue of sterling debentures, bearing interest at $\frac{4}{5}$ or 5 per cent. There can be no doubt that it is wise to borrow at a lower rate of interest than 6 per cent., which is the present rate. English lenders very much prefer loaning on bonds which must be placed below par, and which are likely to increase in value. Alderman Turner suggests that the special sinking fund be abandoned, and that, instead, the special revenue derivable from the rents of the city property be appropriated as a sinking fund. The scheme involves a number of details, one of the principal of which is a provision for raising money for special improvements, chargeable on the streets benefited. One of the difficulties, indeed the principal one, is that the outstanding 6 per cent. debentures may not be presented for payment. Alderman Turner proposes that in future there shall be no sinking fund provided, except for the new loan, so that 6 per cent. will be the outside amount required, and that on the consolidated debt of \$7,500,000 would be \$450,000 or \$50,000 less than the present appropriation for the debt. Alderman Turner has invited criticism on his scheme, and our Toronto contemporaries have not received it with disfavor. Some of his views are applicable to our own city debt, and to our appropriations for local improvements. The taxation in Toronto

has reached 21.5 per cent. and we observe that the debt has increased in a much greater ratio than the value of assessable property. Alderman Turner's speech is well deserving of careful and thoughtful consideration.

GILT-EDGED BUTTER.

The old and true saying, that "Whatever is worth doing at all is worth doing well," applies more strongly to the making of butter than perhaps to any other article of industry, and more especially at the present day in Canada. The immense quantities of this important article of export which laid all last fall and winter in our warehouses, unmarketed because unmarketable, entailing heavy losses upon the trade and wrecking some of our most enterprising dealers, should be sufficient experience for the present generation, and induce them to guard against the recurrence of such a catastrophe. The trade as well as the consumers will recollect what high prices were procurable during last season for good, sweet butter, as high as 35 cents per lb. being paid to the retailer for such an article, and for which he found it difficult to supply the demand at a time when the market was glutted with what should have been worth hundreds of thousands of dollars had reasonable precautions been taken by all parties concerned. We deem it our duty to set our readers a-thinking seriously on this subject, and to afford a few practical hints as to the method and possibility of always producing what is known as "gilt-edged" butter, as applicable to both creameries and farm dairies.

Let us begin at the beginning. Perhaps a few words as to the choice of stock may not be out of place. Mr. Geo. E. Waring, of Ogden Farm, New York, in his "Handy Book of Husbandry," recently issued, says:—"Much attention has been paid during a few years past to what is known as the Milk Mirror or Escutcheon. The relation between this and the capacity for milk was discovered by Mr. Guénon, a native of the south of France, whose early life was passed in the care of a herd of cows. Being a close observer of nature, an excellent judge of cattle, and a man of great natural sagacity, he established, after many years of investigation, a system by which he claimed to be able to determine the quantity of the yield, its duration, and the quality of the milk for the manufacture of butter, by what he called the "Escutcheon." He received a gold medal from the Agricultural Society of Bordeaux, as a recognition of the value of his discovery; and although many of the details of the intricate system established

by him have failed of general adoption, the general principle on which his system is based is of so much value that it is often taken as an important criterion in the selection of dairy animals. The milk mirror is the upward-growing hair on the back part of the udder, and the inside of the hind legs. An examination of any cow will show that the line where this hair meets the downward-growing hair of the immediately adjacent parts of the body is well defined by what is called a "quirl," and the hair included within the quirl and covered by the upward-growing hair is the Milk Mirror. The shape of the Mirror is very different in different races, and generally assumes one of two or three different forms. For details concerning this subject the reader is referred to well known publications in which it is set forth. For the present purpose it will be sufficient to say, in general terms, that, as a general rule, the size of the Mirror bears a pretty constant proportion to the amount of the yield of milk, and while it is true that this indication of great milking qualities, in those cases where it is a reliable indication, accompanies such other general characteristics as of themselves indicate good milkers, at the same time it is one which is so easily studied that it constitutes perhaps the simplest indication of the general dairy qualities of any individual animal.

The great value of Guénon's system depends on the fact that in calves which, either by the texture of their hides nor the conformation of their bodies, nor, indeed, by any of the general marks on which we depend in the selection of dairy animals, give any indication of their future milking qualities, it is possible, by a sole dependence on the character of the Escutcheon to predict with considerable certainty their future usefulness for the dairy. Of course, owing to the slight development of the udder, the Escutcheon is always very much smaller even in proportion to the size of the animal, than in the milch cow; yet the different proportions that the escutcheons of two calves bear to their size are an excellent general indication of their future usefulness; and any farmer who will carefully study this peculiarity of his animals during the various stages of their growth, with the assistance of the plates laid down in Guénon's book, (also to be found in Mr. Flint's work), will arrive at a tolerably accurate means of judging of the value of full-grown animals that it is contemplated to purchase, and of the calves that his own herd produces."

Those who have had experience in the care of cows need no hints from us as to the character of food which influences the