

markets. This practice is so calculated to sow death and sickness among our people, that oftentimes, immediately after a merry repast, people may consider themselves lucky that only one victim dies when the whole family might have been poisoned. The danger here lies mostly in the cities, where all these deliterious products are sold under cover of the incognito. In my opinion, two things are required to have meat of good quality, and it is in the public abattoirs that these qualities might be entirely realized. In the first place, cattle ought to be examined before slaughtering. This ought to take place twenty-four hours before slaughtering, and in warm weather a few hours before that. The weight and certain physical characters which ought to form part of the physical examination of the animal ought to be considered, in order to find out whether or not the animal is fit to be slaughtered. I am aware that this condition cannot exist unless we have a public inspector of the abattoirs, who should not only examine the meat in the stalls but also examine the animals to be slaughtered. There are a great number of animals which are not at all fit for slaughtering; so that in this case, as in many others, there is a matter for consideration. And I am sorry to see that the public abattoirs which Montreal had established within its limits have not met with as much success as might have been desired, for I consider these establishments as being the only means to ensure the consumption of first class meats, especially when there are connected with them duly qualified Inspectors, in possession of the scientific data which are necessary to determine the quality and value of the meat offered on the market, particularly as regards animals which have been slaughtered before importation, as in the case of pork. Moreover, I consider that at the present time, in our large cities the Inspectors have not the qualifications which are required to ensure the necessary protection. Besides, we have the meat which is dealt out by the butcher himself, and here is an extract of a work which deals with this matter and which has been quoted in 1875, before the French House of Representatives by Mr. Mauchère, in reference to the quality of meat. He says:

"The colour of the flesh must be vivid and ruddy.

"The simple touch must give a sensation of firmness and also a light flexibility. The pressure must denote a certain amount of density, a certain resistance of traction. There should be no oozing out of the muscular juice, nor should the hand feel a sensation of cold, of damp, or of oiliness. The palpation of the covering must be sonorous; that of the meat cut into quarters should be rough.

"The fluidity and glairy aspect of the fat are of a nature which ought to determine the rejection of the meat."

And is it not a fact that cattle are liable to suffer from a great many diseases? There is pleuro-pneumonia, cattle plague, anthrax, malignant pustule, diseases of the respiratory organs, sheep's rot, and all the parasitical diseases. Among the most important I shall mention the taenia and cysticercus of cattle and swine, the hydatides of the brain, which are often found among sheep; that special kind of phthisis produced by the *strangylus filaria*, and lastly, trichina, which produces, especially among people who eat raw meat, that terrible disease called trichinose. *Trichina* spreads over the whole muscular system of the patients and the parasites become millions with such rapidity that death ensues, accompanied with great suffering. It has often been pretended that the prolonged coction at a high temperature will destroy the vitality of the parasites, and that the meat which contains them may be eaten with safety. I think it is preferable to leave that practice to the Germans who have recommended it. When it is remembered that 60 degrees of heat do not always kill trichina, it is a matter of material importance that cattle suffering from parasitical diseases should be prevented from finding their way into our markets. We have even now on the market certain preparations which are considered very good as articles of diet for the sick, and which I think ought to disappear, for they owe their

popularity to the misuse of the credit of a great name, which was the means of starting this industry. I refer to extracts of meat which have been prepared to utilize the meat which is lost in such great quantities during transportation. These extracts are offered to the public as valuable food, as a good substitute for meat, but they are only concentrated broth, devoid of gelatine or fat and, according to Mr. Provost, physician of the Lariboisière Hospital, at Paris, the extract of Leibig, taken in great quantities, constitutes a poison. He has come to that conclusion after experiments made on dogs, which, when fed on it, died more rapidly than if they had been deprived of food altogether, owing, probably, to chloride of potassium and other salts of potassium contained in that extract. If it has less effect on men, Mr. Speaker, it is because we use it in smaller proportion, or not so often, and if we are sick we are attended to by a good physician. All these facts, and a great many others too numerous to mention here, require the care and vigilance of our legislators, who should avail themselves of all possible means of preventing the numerous cases of diseases and the frequent cases of death which are due to the sale of meat, a source of danger the greater as the use of meat is so general, and as too often the price is looked at more than the quality. Again, I say that the compulsory establishment of abattoirs, with competent Inspectors connected with them, and obliged to visit the markets, are two means by which we can remedy the many dangers which beset our path. Confiscation, fine, imprisonment, as in cases of misdemeanour, ought to be applied, according to the degree of guilt proved. Now I shall speak of another substance which forms a very important part of our alimentation. I shall say a few words on the adulteration of milk, this substance which is so very nutritious, this nourishment which is so very complete, whose digestion is so easy, whose use is so very universal for the rearing up of very young children. The physical characteristics of good milk are too well known to make it necessary for me to enumerate them. Here, however, as in everything connected with trade, the dealer has found means to falsify considerably. Milk is still pure in the country places; we cannot complain on that score; but in cities there are certainly good grounds for bitter complaints. Perhaps the cause of the numerous cases of poisoning and deaths of children lies here. If you will allow me, Mr. Speaker, I will tell you, in a very few words, what are the different adulterations and falsifications of milk which occur in cities among milk dealers. The analysis of milk is easily made, but it is important that it should be made rapidly, and very often a complete analysis requires a good deal of time. It will be sufficient to take its density by means of Quevenne's densimeter, which gives just the quantity of water added on an average, the more so if it is skimmed milk. The different falsifications of milk are mostly: first, the addition of water, easily detected by means of the densimeter to which I have referred; sometimes its blueish colour might indicate the presence of water, but good care is taken to whiten it with bicarbonate of soda, starch and other substances. But by taking the density there can be no mistake. Then there is the skimming. This is a very common practice, and it is double profit, for the whey is sold and the butter is kept in kind. Sometimes horse brains are pounded and added to milk, to imitate the appearance of the cream of which it has been robbed. To discover the substitution of other substances for cream, Marchand's lacto-butymeter is used, and to detect the addition of pounded brains, all that is required is to let this cream raise, and to keep it for a few hours. It soon putrefies and gives a characteristic smell, altogether different from the acid smell of altered cream. Then there is the addition of sugar, gum, caramel, gelatine, &c., which are detected by the density. The condition of the animals has on milk an influence which it is difficult to appreciate chemically, but which reveals itself by the effects