Tesselated pavements with other and interesting specimens of manufactures are acknowledged. The library is entirely free for consultation, and is said to be more readily accessible than any other free library in the Province.

IMPROVEMENT FUND.

The "Improvement Fund" for 1859, accruing to the several Municipalities in Upper Canada, to be expended in Roads and Bridges is now in course of distribution.

PATENT OFFICE.

The business of the Patent Office is steadily increasing. During the past year, the fees received for Patents of Invention amounting to $3,020 00, those for assignments, copies of specifictions, and registration of Trade Marks to $194 30, amounting together to the sum of $3,214 00, which has been paid to the credit of the Honorable the Receiver General. This department of the Bureau has now become self supporting.

The Royal Patent Commissioners in London, continue to present to the Bureau the specifications and engravings of patents issued in the United Kingdom They now amount to 500 volumes.

Since the removal of the Government to Quebec, 443 models have been received by the Patent Office.

It is much to be regretted that want of accommodation has hitherto deprived the public in a great measure of the advantages which they would otherwise derive from the museum of models and valuable library of books. The models should be classified, numbered, arranged, and a descriptive catalogue should be prepared. The room might then be open to the public, say daily during the session of Parliament, and perhaps twice or thrice a week during the remainder of the year.

In conclusion the undersigned alludes with the deepest regret to the loss which this department has sustained in the decease, during the past year, of Mr. W. Hutton, for many years the active Secretary of the Bureau.

The whole humbly submitted.

N. F. BELLEAU,
Minister of Agriculture.

Bureau of Agriculture, Emigration, and Statistics, Quebec. April 1862.

The Preparation of Food for Cattle

The directors of the Royal Agricultural Society of England have recently introduced the practice at their monthly meetings of discussing agricultural subjects. In the *Irish Farmer's Gazette* of the 17th ultimo, we find the following condensed report on the interesting and important subject of "preparing, mixing, and cooking of food for cattle." Mr. Frere, the editor of the society's journal, introduced it to the meeting, and based his observations on Professor Voelcker's paper on the composition and nutritive value of straw, which appeared in the last part of the Society's Journal; on Mr. Lawes' reports of his experiments conducted on the Duke of Bedford's estate; and, finally, on "his own small experience in cattle feeding last autumn." Mr. Lawes stated, however, that the results of the experiments which he had made and to which Mr. Frere alluded, could not be taken as a standard in so far as related to the comparative merits of cooked and dry food having been conducted for another purpose altogether—namely to ascertain the amount and composition of the dung of cattle, and more particularly with reference to the loss of ammonia. We may, therefore, set aside those of Mr. Frere's remarks which were based on Mr. Lawes' report, as being inapplicable to the subject under consideration, and pass on to some of his subsequent observations.

He alluded to the practice of giving cattle first a bait of meal, then a bait of turnips, and so on; varying the food at diefferent parts of the day, informing the meeting that the most experienced feeders he had met with considered it best to mix roots, cake, and meal, giving the same mixture at each feeding time. Referring to his own experence in cattle feeding last year he stated that he had been

"Anxious to try the effect of cooking in the case of 10 beasts, 21bs of bean meal boiled and poured over the chaff was to stand for 24 hours 21bs of cake were then added to this mixture and it was served up next day. Of these 10 beasts one obstinately refused to eat the mixture. It was a white bull with a black nose and was decided the worst beast of the lot. So stoutly did it reject the mixture that it would eat the straw turned out from the cart horses rather than this prepared food. It was then ordered to have bean-meal unboiled, the meal being still mixed with straw, which was moistened the day before, and a small quantity of malt combs, which was also moistened on the previous day. At this moment that which was the worst beast of the 10 was indubitably the best: it weighed over 8 stones more than those which were of the same size when they came in, and 1 cwt. more in live weight than the smaller animals did when they came in. In short, it weighed 56lbs. more than any of the other beasts in the lot. He mentioned the case to Professor Voelcker, who, in his reply said.—The incident you mention with respect to your black-nosed bullock is curious. I do not like to boil pea-meal, or to pour it afterwards over roots and chaff. Substances so rich in nitrogenized matters as peas and bean meal are very apt to give rise to putrefaction, instead