Dr. Valintine has gone on six months' leave, and I hope that in turn the other members of the scientific arm of the Department may be permitted to pool their leave, and so visit the schools and workshops of the older world.

Last year I drew your attention to the value which the Department would receive by allowing the District Health Officers to commute their yearly leave, so that they might be able to visit other parts of the world. My recent journey through Britain and the Continent has only more fully confirmed me in this view.

## MILK-SUPPLY.

That there is urgent need for more stringent examination and efficient control of the various agents who handle this most important article of food is evidenced by the exhaustive report of Dr. Valintine and the various District Health Officers. In my statement to you for the year 1902, and subsequently, I drew attention to the unsatisfactory way in which dairies were governed and supervised. I am not now considering the milk which leaves the colony either as butter or cheese—the system of grading initiated by Mr. Kinsella, Chief Dairy Commissioner, assures in a very great measure the real goodness of that which goes to feed our customers oversea—I am looking rather at that which is consumed by our own people in the colony.

The unsavoury and insanitary state of many of the small byres, the ignorance or want of care of many of the milkers, combined with the occasional ill treatment of the milk by carrier or distributor, results not infrequently in transforming an ideal food for children into a veritable agent for ill health and death. The importance of conserving the purity and food-value of milk has been realised by sanitarians all the world over. Nothing has been the subject of more writing, criticism, and suggestion in public-health journals within recent years than the question of how best to hand to the consumer this important fluid in the same condition as it came from the cow. Above all articles of alimentation the most susceptible to adverse and insanitary surroundings its protection from these seems most difficult to obtain. The struggling, hardworking, if often hard-up, keeper of cows finds it difficult even when convinced of the necessity of erecting comfortable, sanitary, milking-places to do so. The early hour at which the work has often to be done in order to meet the urban market offers difficulties which only up-to-date byres, capital, and ideal honesty can solve. Mechanical milkers, hygienic milking-pails, are often, or are at any rate considered to be, outside the reach of the owners of small herds. Large measures of reform are undoubtedly required in these directions, but even when these have been assured, great deterioration can and does take place in consequence of the manner in which milk is treated during its transit from the dairyman to the retailer. It would seem at first sight an easy matter to take such measures as would prevent ill usage at this stage, and were there no undue dispersion of effort a great deal could be effected at this point. As it is, the dubiety as to responsibility which at present exists as between the Agricultural Department, the local authorities, and this Department, has prevented any sustained and effective control. The buyer, however, is far from free from blame. One has only to take his walks abroad before the shutters are down, so to speak, and see the heterogeneous kind of receptacle set outside the respectable ratepayers' doors, into which the milkman is required to dump the pint or quart, and it is easy to realise that even if the milk had escaped all the previous perils it has many more to meet. Wide-mouthed open jugs, tin billies, with here and there only a properly con-Grant that careful inspection has secured the structed vessel, adorn the doorsteps or window-sills. cleanliness of the milk till the sleepy distributor has measured it out into the vessel, what dirt and dust may not be swept into it as it waits exposed to the wind-swept streets?

The whole system wants rearranging. It must first be clearly laid down who is responsible for the sanitation of the cow, the byre, the carriers, and the distributors. The present uncertain responsibility as to the control must be settled. There should be no difficulty in deciding this. Short of requiring the Health Department to control the whole cycle from the cow to the consumer—that is, of milk consumed by our own people—the Agricultural Department might be made responsible for its purity until it is put upon the train, and this Department should have absolute control from that point.

I cannot help thinking that my previous suggestion, though possibly not the best, should at least be given a fair trial. Briefly, my proposal was that all milk entering any town of over 4,000 inhabitants should pass through a municipal conduit. It should be delivered at a municipal pasteurising-factory. There it should be carefully assayed, pasteurised, and delivered by officers of the borough. No hardship need be entailed on the supplier, large or small. Just as the farmer now has his interests safeguarded at the butter-factory, so could they be at the municipal depot. He could be, as now, credited with the butter-fat value of the milk he sends in, while the passing of it through a general pasteuriser would, in a measure, eliminate most of the noxious materials which it had acquired either at the time of milking or in transit. By reason of the bulk, the municipality could conduct the operation cheaper, and what is of more importance, with greater certainty. From the depot it could be sent out in pro-