as grown to

15

shall quote eport of the Agriculture:

110

ev ...14,702,815

...63,894,186 300,000 ire ...\$7,000,000

1,910,000

...14,800,000 1,090,000

...22,500,000

950,000

....20,500,000

age per colony 73 tbs 21 lbs 211 ths

h the inmates from the egg

rming season, conditions a known as a queens which

e 269)

THE PANCREAS MAY DIGEST WAX

A Chatty Letter From Mr. Robinson, Victoria, B.C.

I wish the C.B.J. all the success possible. It certainly has improved much since passing into your hands. It is value for money that people are after now. Sentiment is out of the question in these days of strenuous effort. I see no reason, while the C.B.J. continues to give as good, sound teaching, rather ahead of requirements, as it has been doing of late, why it should not hold this broad Canada of ours to itself, and gradually, reduce the subscription to the American journals, good as they may be.

As regards bee-keeping in the West, I think it must necessarily be slow. Our country (B.C.) is young, our good farming lands patchy and in many places covered with bush. On the coast we have no native trees yielding nectar, as the basswood of Ontario, but the C.P.R. is letting contracts for clearing large tracts of land on this island, and bee-keeping will follow here, as it has done in other places; but just at present it is only in a iew favored places where it can be made profitable. No doubt much more can be accomplished when our Government does for the would-be bee-keeper what Switzerland, Russia, New Zealand and the British Bee-keepers' Association (with its bunty asosciations) are doing for their ally composed respective countries. I have before now orty thousand poken to our Deputy Minister of Agriculture on the subject, as so many around d drones; and Victoria seek aid out of their troubles with the bees from myself; but so far tothing has been done. Had as much n is the only information been given on bee-keeping as in the hive, has been given on fruit culture, we h produce the should see more hives scattered over the females, the sountry.

I shall be making a rather comprehenqueens which I shall be making a rather comprehen-this insect we sive exhibit at our Fair this fall if possible. I had intended to make a de-

nonstration of live bees if I can find the time to attend. We are to have a new exhibition building, and it will be incumbent upon us all to make a good show under the circumstances.

Now as regards the food qualities of wax as eaten with comb honey. The question of digestion is very complex. I had always assumed that wax would be indigestible, but friend Hutchinson's remarks set me thinking, well knowing that wax was a hydro-carbon, like honey, fat, starch, etc., its composition being 80.20 carbon, 13.14 hydrogen and 6.36 oxygen; nearly as heavy as water, being .960 to .965, and melts from 145° to 150° Fah.

Not knowing the exact function of digestion regarding hydro-carbons, I turned to an excellent work I have on Food, it being four lectures delivered before the Society for the Encouragement of Arts, Manufactures and Commerce, by H. Letheby, M.B., M.A., Ph.D., Professor of Chemistry in the College of the London Hospital and Medical Officer of Health and Food Analyst for the City of London-quite an authority on such matters. There I find neither heat, the gastric or the salivary secretions necessary to disintegrate, dissolve or assimilate hydro-carbons like fat or wax. It is the pancreatic fluid, a secretion from the pancreas or sweetbread, that is chiefly concerned in the digestion of fatty matters, and I assume its action would be the same on wax. "The true action of the pancreatic fluid is to break up the large granules and globules of fat (hydrocarbon) into myriads of minute particles from 1.3,000th to 1.15,000th of an inch in diameter. In this way fat (may be wax) is emulsified and converted into a milky fluid, which freely mixes with water and passes through the tissues and is assimilated in the system."

A Dr. Dobell experimented in the laboratory of Messrs. Savory & Moor, of London, on the action of the pancreatic