

being repulsed by the man, retire in a disorderly manner. Charlie, who is timid, abandons Leo to his fate, but he, more fearless, turns and shouts at the man that he will "div him box on no," that being "the buster's" favourite mode of warfare. At last Peter gets our tickets and our checks, the boys march triumphantly past the gate-man, who smiles benignly at their defiant little faces, and we are soon comfortably seated in the cars.

Just as I begin to feel somewhat composed Leo makes his appearance at the window, and is greatly surprised to hear that we have had so much trouble. He wonders why we came down so early, and why we should have so many parcels, and why the boys can never be still, and finally wonders what I can have done with so much money. This is the last straw, and I give him such a reproachful look that he hastily changes the subject, and tells me that Mr. Rivard the hotel-keeper will meet us at the depot, and he himself will follow us by the next train, and then he kisses us all as though we would not see him again for a month, and the bell rings and the whistle shrieks, and we are off to Vaudreuil. Now, I wonder does every one know where Vaudreuil is! I didn't; and I consider myself a woman of average intelligence, and have resided on the island of Montreal—on and off, and a good deal on—for the last—ahem,—say thirty years.

(To be continued.)

Georgie Graham.

DOMESTIC ECONOMY.

As the holidays are approaching we beg to tender one small piece of advice to wealthy parents who are about taking their children to the country or seaside. It is this, if possible take with you a good governess. "But," you exclaim, "the children are worn out with study already and require perfect rest." That is very true, and we should be sorry to see them *study* during vacation, but a clever teacher, who would be willing to ramble about with the children for some hours daily, directing their plays and talking to them in an interesting and instructive manner, would teach them more in a month than they would learn at school in a quarter. For the first few days let the little ones run wild, and let the good governess rest and enjoy herself too; after that you will find that they will gladly gather into some cool nook during the hottest part of the day to listen to well-read stories of history, travel or other branches of information. Now-a-days delightfully instructive books on all subjects may be found, and with a wise teacher the little ones may really tread a "royal road to learning." If one cannot afford a governess, mamma herself should be a great deal with the children, reading wise stories, even fairy stories sometimes, and discussing last session's school work. Those who have not tried it can form no idea of the superiority of individual teaching.

It is a great pity that the old country fashion of home-study under a governess is not more in vogue here. It certainly is from no lack of good teachers, who may be had at the most reasonable rates; but most people think their children cannot learn unless they go to school, while we are sometimes inclined to think the more they go to school the less they learn. It is certainly a great mistake to send young children to large schools.

Canadian girls are very often sent to school in England because their parents think that there they will meet with children of nobility and gentry and become more refined and elegant young ladies. This is a mistake, as the really higher classes in England do not send their daughters even to private schools; they are taught at home by governesses and tutors, and fortunately this can be done in Canada much cheaper than in the old-countries. Here we have many graduates of McGill and other colleges, whose terms as daily governesses, or tutors are very reasonable; and when girls are old enough to make special studies of music, languages, &c., they can find no better teachers anywhere than those in Canada. However, people must be educated up to these things, Rome was not built in a day.

Meantime let us beg that no families will remain in Montreal for economy this summer, since they may really live in country places within easy distance much cheaper than they could in town. All through the Townships board may be had at very reasonable prices; the houses are clean and comfortable, and the cooking fairly good. Parents often prefer taking their children to the French villages that they may learn the language, but often these villages bear a bad name from lack of cleanliness and the prevalence of diseases; when there is any doubt on the subject one should send an advance guard to spy out the land. As usual "an ounce of prevention," etc., besides when families intend remaining months, if they do not keep house they should at least take their own bedding, and common wooden bedsteads. Spring and hair mattresses can easily be packed up and cost little to convey. If nothing better can be had, better let the children sleep on fresh straw-beds rather than on doubtful old ones. A few clean bed-ticks are easily carried and may be filled anywhere. Unless one is certain that the house-keeping is immaculate, the bedroom carpets should always be dispensed with; but care must be taken when washing the floors that no damp should remain until night. Whether in town or country, every article of bedding and bed-clothes should be thoroughly *sunned* at least once a week, and of course the day that the floors are washed is the right one to do this; the bedding can then remain out until the floors are dry lest it

should catch any damp. Floors should be washed before noon and only on sunny days.

The majority of Canadians seem to know little of the value of the sun as a purifying agent. One may go into hundreds of Montreal parlors which are certainly regularly swept and aired, and yet a sort of heavy, damp smell meets one at the door, and if one goes in very warm the damp soon makes itself felt, as well as smelt. These rooms are often a cause of disease, especially as grate fires are never lighted in them. Indeed we often wonder why so much money is expended on chimneys and mantles which are not intended to be used. But to preach the beauties and usefulness of grate fires to the good house-keepers of Montreal would be a fruitless task. Again, one must be educated up to these things; but the sun, surely we may persuade people to let the sun shine into every room in the house occasionally. Ask any medical man in Montreal and he will tell you that rooms which are never sunned are unfit for habitation.

One more little bit of advice to those who do not intend to remain long enough in any country to be bothered by carrying bedding:—take with you a good strong tick to be drawn over doubtful looking mattresses, this together with a large supply of borax to sprinkle about the beds will render one tolerably safe from intruders which unfortunately abound in Canadian country places. Of course if any stay is to be made one should insist that everything in bedrooms should be thoroughly washed under one's own eye, unless perfectly satisfied with the appearance of things. But slips for mattresses are useful things for anyone who intends going about much. Nice English people always carry them, and it is now usual to take one's own bed-linen, but this is done by those who travel with servants. After all there must always be a sense of comfort and security about one's own home which cannot always be met with elsewhere, and those who can take a house in the country may have more trouble, but they will also have their compensations. Even in the best hotels and on the most elegant Pullman cars one must feel a vague sense of discomfort while one wonders what sort of people may have slept in those beds and rested their heads upon those pillows, of course these are clean sheets and slips, but alas! they are so thin.

THINGS IN GENERAL.

ON THE ACTION OF ALUM IN BREAD-MAKING.

The object of the baker in using alum seems to be a question upon which there are many opinions. It is frequently stated that it enables the bread to hold a larger quantity of water; this I undoubtedly consider a mistake, as I have estimated the moisture in all samples of bread that have passed through my hands and have found on the average, no difference in moisture whatever between pure and alumed bread; but I am inclined to think that it may cause bread, when first drawn from the oven, to have more water, as it is well known amongst bakers that alumed bread can be drawn ten or twelve minutes sooner than pure bread; but this excess of moisture the bread does not retain. The supposition has, no doubt, arisen from the fact that gluten prepared (by washing) from alumed flour retains, after working up in the hand and squeezing, considerably more moisture than gluten obtained from pure flour, which excess of water separates shortly afterwards on standing. Alum is also said to save labour in the kneading of the dough, and so be an inducement for the workman to use it against the knowledge and consent of his master; how far this is correct I am unable to say. It seems certain, however, that the action of alum on flour that has become unsound, by fermentation that has been induced by dampness or heat is to arrest the change, by destroying or arresting the action of the ferment, so that an apparently sound loaf can be produced from unsound flour. But if alum arrests the fermentation, and there can be little doubt that it does so, will it not act in the same way with the ferments of the saliva and gastric juice? This powerful action of mere traces of alum or salts of alumina upon soluble gluten and diastase is, I think, sufficient foundation upon which to assert that alum, either in a soluble form or mixed with carbonate of soda, is injurious to health when introduced into bread; the extent of the injury may or may not be small.—J. W. Knights, in the *Analyst*.

AMBER.

The complete history of amber is yet to be written, but when written it will form a most interesting and instructive volume. Known and valued from the very earliest times, it has a name in most languages, and its Greek name, *electron*, has left its impress upon our own and most other tongues. Nearly 2,000 years ago Pliny, the naturalist, wrote that amber was the fossil resin of an extinct cone-bearing tree, and modern science can say of it but little more. In a short paper on this subject laid before the last meeting of the American Association for the Advancement of Science, Erminnie A. Smith gives an epitome of what is known on the subject. The original amber-producing forest probably reached from Holland over the German coast, through Siberia and Kamschatka, even to North America. One of the most celebrated deposits is on the peninsular of Samland, a portion of Prussia, nearly surrounded by the Baltic Sea. The northern part of this region, constituting the promontory of Brüsterort, is hilly, and the coast banks are often from 150 feet