

a movement for Maritime Union, which would save the ridiculous expense of three Governments, King, Lords, Commons, and all, for less than a million of people, there would have been some sense in it, or at least not a conspicuous absence of patriotism. I suppose what they really want is annexation, but they have more to reckon with than the discontent of a few Halifax merchants, who, although the Province is more prosperous, have not now the monopoly of supply. The result at the polls may not be all the malcontents would wish, there is the Imperial Government also to settle with after all is said and done on this side of the water, and those who do not find themselves specially allured by the polity of the United States may be thankful that we are still *de facto* under the regis of Britannia, who is, thank goodness, very far from dead, or even decrepit yet, in spite of her intestine troubles.

Your excellent paragraph on "Mad Dogs," (CRITIC, May 21), reminds me of the "Pastour Crazo," as it is called by some who have done a good deal in the way of investigating Mr. Pastour's claims and methods. I have a whole literature on this subject at hand, and some points appear plain enough.

The first is, that Mr. Pastour being hasty and sanguine (as well as interested) makes large assumptions which are not borne out by evidence. His nature, as arbitrary as Mr. Gladstone's, seems to keep him unconscious of the conflicting nature of many of his statements, but they have been ruthlessly pulled to pieces.

Every patient who does not die is claimed as a success. In several of the most loudly-trumpeted cases, there was nothing to cure. The dog which bit the children sent from New Jersey, has been proved not to have been mad at all. It is all but certain that the one who bit Mr. Hughes, at Norwich, was not mad. There is scarcely proof of madness in any of the cases, except that of the wolf who bit the Russians, and three of those patriots have died.

The mode of preparation of the virus and its attenuation is such as to throw grave doubts on its certainty of action, and indeed of its real efficacy where it does act.

The subject has been treated at considerable length by Dr. Dulles, of Philadelphia, and I shall, in a future notice, give some curious details from that gentleman's pamphlet, as well as from other sources. Meantime, there is no small reason to doubt whether the idea is not a delusion, and it would be well for persons unlucky enough to be bitten by an animal supposed to be mad, to keep their heads cool, and think twice before undertaking a trip to Paris, bearing in mind that real rabies in dogs is far from common, and that nine tenths of supposed cases are only exhibiting the effects of cruelty and terror.

FRANC-TIREUR.

[FOR THE CRITIC.]

BLACK KNOT.

The unsightly excrescence on plum and cherry trees, commonly called black knot, is occasioned by a fungus which has received the scientific name of *Sporia Morbus*. Spores or seeds of this fungus find congenial lodgement in the inner bark of these varieties of drupaceous trees, and these only, as far as I know, and germinating, send out numerous small, clear, silk-like microscopic threads, which, nourished by the sap of the tree, increase and ramify rapidly; occasioned by their irritating presence, abnormal growth of the cellular tissue infected, and ultimately, this combined growth bursts through the outer bark, and continually nourished by the ascending sap, increases in size, some specimens attaining six inches in length, and over an inch in depth. At this stage of its life history, the fungus develops the first of a series of reproductive organs, of which there are, in all, five varieties, which have received the characteristic designations of conidia-spores, ascospores, stylospores, spermatia, and pycnidio-spores. These develop and mature their peculiar spores at successive seasons of the year, and as, in spite of ponderous designations, they are extremely small and light, easily wafted to great distances by every breeze, excellent facilities are afforded for the propagation of the disease. Fortunately, only plum and cherry trees are the "hosts" of this unwelcome guest.

It will be seen from what has been said above, that the black knot consists of the filaments or roots of the fungus, its reproductive organs, and the abnormal growth of the cellular tissue and bark of the "host."

The black knot is said to injure and destroy trees infected with it by appropriating for its own growth nutritious sap, required for the nourishment and healthy growth of the tree. This structure must also interfere with the circulation of sap and nutrition of infected branches. I have no doubt also, that defective vitality, due to deficiency in the soil of one or more elements essential to vigorous plant life, favors this fungus, or the production of black knot, in some as yet unexplained way, and also renders the trees attacked less able to resist destruction.

If this be the case, judicious feeding should be a prophylactic as well as remedial measure. At any rate, though harm may be done by too high manuring with nitrogenous food, ashes, supplying principally potash and lime, can only do good. However this may be, thorough extirpation with the knife, and subsequent destruction by fire, of all black knot is positively essential. After extirpation, it is recommended that salt or copperas water be applied to the wound.

An old English gardener, who helped to while away, not unprofitably, tedious hours of waiting at Windsor Junction, told me that a salve made of sulphur and lard is the best application after excision of black knot.

Destruction of this excrescence is a duty that every farmer owes, not only to himself, but to the country; and it should be made compulsory by efficient legal enactments and penalties.

A law having this object, is among the Statutes of Ontario (12 Vic., chap. 33), but as there is no adequate provision for enforcement, it is said to be a dead letter. This should be the duty of a specially appointed official, or of the road overseers, or other existing officials.

No means should be left untried to stamp out this disease. Our very efficient Fruit Growers' Association, and our Secretary for Agriculture, should take the matter in hand. This is a secession measure really worthy of the attention even of the successors of our Board of Agriculture. Mr. McDonald will find, in the Report for the year 1875 of the United States Commissioner of Agriculture, on page 206, brief account of the cause and structure of black knot, and on the opposite page, an illustration of a typical specimen of a perithecium (surrounding envelope and contents) of the fungus.

EDITOR MARITIME PATRON.

NOTE.—I had almost forgotten to mention that the larvæ of the curculio has been found in the black knot, an important and valuable discovery for both orchardists and the curculio, affording the former an additional reason and incentive for destroying the fungus, and the latter as hospitable and more secure host for its larvæ than the plum itself. See with reference to this, page 172, 9th Annual Report of the Ontario Agricultural College.

POLITICAL REVIEW OF THE WEEK.

Thursday, May 27.—Thompson moved the house into committee on the bill respecting real property in the North-West. Bill passed through committee and was read a third time.

Chapleau moved the house into committee on the public printing bill. Considerable discussion took place, the opposition attacking the government for giving advertisements almost entirely to the papers supporting the administration. The bill passed committee and received a third reading.

Friday, May 28.—Somerville moved for a select committee to investigate a certain charge he had made against Hector Cameron, said charge being that Cameron procured a bonus of \$96,000 for the Erie and Huron railway on the understanding that he and two others should get ten per cent of the amount.

Cameron said that he had acted as the solicitor of the company but never was interested pecuniarily in the bonus, nor did he ever make any such bargain, and he courted an investigation.

Langevin said that the charge ought to have been made long ago, and not near the close of the session. He moved in amendment that the charge be referred to the standing committee of privileges and elections. On division the amendment was carried.

Pope moved the house into committee for consideration of railway bonus resolutions. He spoke in favor of developing the older provinces by means of railways.

Considerable discussion took place on the subsidy to a company to build a railway from Moncton to Buctouche, a distance of thirty miles. Landry spoke on the benefits to be derived from the construction of the road. The item passed, as did also the item for a bonus for the Northern and North-western railway.

After recess the house considered and agreed to the senate amendments to the bill incorporating the North American telegraph company.

The house then continued the consideration of the railway resolution. The Corquette item of \$32,000 was considered and passed, and also the item giving a subsidy of \$38,400 to the Joggins railway. The proposed subsidy for a railway from Truro to Newport passed. The Cape Breton railway bill was taken up. After its second reading the house went into committee and passed it without amendment. The other Nova Scotia and New Brunswick railway subsidies mentioned in the resolution were carried.

Saturday, May 29.—Sir John A. in answer said that no protest against the appointment of Wallace Graham as legal agent of the government at Halifax had been made on the ground that he was a partner of C. H. Tupper, M. P.

Costigan rose to a question of privilege, and denied the accusation made against him by Cameron (Huron) that he was concerned in grazing land, coal areas, and timber limits. Haggart also denied the charge made by Cameron that he was interested in contracts on the C. P. R.

The electoral franchise bill was read a third time. On the third reading of the Cape Breton railway bill, Pope said the government would deal with the Nictaux and Atlantic railway next session, and admitted the claims of western Nova Scotia to larger aid than had been given.

On motion that the house go into committee of supply, Cartwright spoke against the increase of the expenditure since 1878, the increase in the fixed charges and the increase of taxation, notwithstanding which latter fact there was a deficit including the outlay on account of the rebellion, and moved an amendment to that effect, which on division was lost by a vote of 36 to 70.

Monday, May 31.—The Northern Pacific Junction railway bill was placed on the government orders.

Thompson moved the house into committee to consider further amendments to the franchise act. The principal amendment to be proposed was one to suspend the penalties provided by the bill until next year, which, after discussion, was carried. On the motion that the bill be read a third time, Mills moved an amendment proposing that no persons should be qualified to vote at elections for the House of Commons excepting those qualified to vote at the provincial elections. The house divided on the amendment, which was lost, 92 to 64. The bill was then read a third time and passed.

(Supplementary estimates and conclusion of Political Review next week).