the Americans of the eastern coast in very large, and, I think, increasing quantities; and their supply I know comes to them very largely from the Bay of Fundy. I know it is popularly supposed that they use it for altogether another purpose, viz., to render a dry soil moist. According to any theory orknowledge that I am able to circumvent, it cannot have this effect. But let us take the instance of a country which, instead of being drier, is more humid than ours-Scotland. I hav, been lately informed by a young Scote man from Midlothian, that the farmers there pay sixteen dollars a ton for this uninteresting looking stuff which we in Nova Scotia get tumbling down about us from the cliffs for nothing. If I am rightly informed then, there can be enough gypsum got in the Strait of Canso, with very little expense, to last the northern and eastern parts of Nova Scotia, for all purposes, for ten thousand

But it may be that suggestion is preferable to exhaustion of a subject. It so, I shall add no more at present upon the deficiencies of soils, or diseases of stock.

CLOVERDALE.

E. GILPIN, F. R. S. Ca., Government Inspector of Mines, has prepared a concise account of "The Minerals of Nova Scotia," which has been neatly printed in pamphlet form, and is intended to accompany the collection sent under Dr. Honeyman's care to the Dominion Exhibition at Kingston. A sketch is given of the distribution, extent and working of our gold mines; iron ores and smelting, with analyses; copper ores; lead and silver, manganese, gypsum, paints, barytes, salt, mineral springs, building stones, graphite, infusorial earth, grindstones. The author well observes:

"The mineral resources of Canada, although great and varied, appear dwarfed by her broad boundaries, and her scattered population, engaged principally in agriculture. In Nova Scotia alone does the miner occupy the position of a distinct class in the community. This is due primarily to its mineral wealth, which I have endeavoured to outline in the following pages, but is, perhaps, equally owing to its favoured position. Placed at the mouth of the St. Lawrence, and overhanging the eastern coast of America, its position marks it out as a halting place in the highways of the sea, and its numerous and deep harbors permit the approach of vessels to within a few miles of every locality yielding mineral or agri-cultural wealth. This facility of access gave rise to an extensive exportation of coal, gypsum, grindstones, etc., to the United States many years ago, and, since Confederation the trade of our mineral

exportation is flowing into Quebec and other Dominion Provinces in a steadily increasing stream. The consequence of this is that our mining industries manifest a steady growth, and their future expansion will be co-equal with that of the Dominion. The natural positon of Nova Scotia indicates that she should be the workshop of Canada; that here, more profitably than elsewhere in the Dominion, can sugar be refined, cotton spun, and iron ores smelted and worked into the thousand articles needed by the contractor, the manufacturer, and the farmer. Here alone in the Dominion are found in juxtaposition, coal, iron, fluxes, gold, etc., a boon conferred by nature on very few countries."

[Copies of the pamphlet may be obtained from Dr. Honeyman at Kingston (during the Exhibition), or at anytime on application at the Mines Office, or to the Queen's Printer, at Halifax.]

The following table shows the distribution of the coal sold during the year 1881 by the Nova Scotia mines:

| Nova Scotin        | .tons | (2,240 lbs.). |   | 382,413 |
|--------------------|-------|---------------|---|---------|
| Ontario and Quebec |       |               |   | 268,628 |
| New Brunswick      | 66    |               |   | 123,526 |
| Newfoundland       | 44    |               |   | 62,174  |
| P. E. Island       | 4.6   |               |   | 49,313  |
| West Indies        | .4    |               |   | 21,600  |
| United States      | 64    |               |   | 113,728 |
| Other Countries    | **    |               |   | 13,612  |
|                    |       |               | : | 007.014 |

## THE PICTOU CATTLE DISEASE.

STELLARTON, Aug. SOth, 1882.

The Editor Journal of Agriculture:

Sir,-I have read with much interest, the Report on the Cattle Disease of this County; but I am inclined to question the prominence given to Rugwort and poor food as possible causes of the disease. I live in a section where Ragwort (Stinking Willie) abounds, where it is impossible to keep it out of the hay, and the pastures are full of it,-though cattle do not touch it—and yet there is no disease here. It cannot be said that many of the cows which have to roun through the woods for a living in summer, are well fed in winter and spring, the revere is rather the case; and yet, as I said before, the disease is not here.

To one accustomed to stall-fed cattle and well-kept stables, the common feeding in this country may seem poor, but poor as some of it may be, it is nothing like so bad as is to be seen in more eastwardly districts of this Province. Hence, I conclude that neither Ragwort nor poor feeding can be causes of the disease, though the latter may make cattle exposed to its influence more prone to take it.

Yours, &c.,

II. S. Poole,

The following observations by Professor Law, V. S., on Anthrax, or what is sometimes called Black Leg in Cattle, may be read with interest in connection with the Reports on the Pictou Cattle Disease, which, although a very distinct form of disease is, we believe, regarded by Dr. McEachran as probably of a similar nature:

There are two varieties of the disease both dependent on the presence in the system of minute vegetable organisms (bacteria) which have acquired the dangerous facility of living and increasing in the blood and tissues of the animal body. One form of the malady is the malignant anthrax proper—the malignant pustule of man-caused by an organism which exists in the blood and vital fluids in the form of microscopic staff-shaped bodies, as well as spherical ones. This type is readily communicable to all species of warm-blooded animals unless they have already been rendered insusceptible by an earlier attack. The second form is associated with a microscopic organism which is found in the spherical form only in the blood and animal fluids, and which has not been found to attack readily other animals than cattle.

Both are equally dangerous to cattle; the first is quite as dangerous to man and other warm-blooded animals. Whether the germs in both diseases are but varieties of the same organism remains to be seen; what is more immediately to the point is that both appear to follow the same law of development, and to depend on the same general conditions for the maintenance of their virulence. This is most inveterate if secluded from air, but is gradually lost in the presence of free air and moisture. Hence the germ once introduced or developed in a soil of a close, impervious, and compact kind, or one over-charged with the remains of animal or vegetable life, or in one habitually water-logged, is preserved indefinitely, while in one which is naturally dry, open, and porous, or which has been thoroughly under-drained, sooner or later loses its virulence. In accumulations of litter or manure, in liquid manure tanks, in close cellars, and the like, it is more likely to be preserved than elsewhere. To check the progress of the malady, therefore, and prevent new attacks, the exposed cattle should at once be moved to soil which is thoroughly drained and pervious to moisture.

The carcases of the dead and all the products of the sick should be burned, cr, if buried at all, should be in a dry porous soil with a covering of quicklime to favour speedy decomposition, and securely fenced in so that no other cattle can approach the place, nor eat the grass grown upon it for several years. If damp or impervious soil only is attainable for burial