

Iron Property For Sale,

SITUATED IN

MARGARETSVILLE, ANNAPOLIS CO., N. S.

Consisting of Fourteen Leases, covering over Two Thousand Acres, through which the Iron Deposits have been traced.

The iron belongs to the owners of the soil, from whom leases have been obtained, extending over a period of sixty-five years. The deposit is of high grade magnetic or specular iron ore, which is present in unlimited quantities. From a shaft sunk 30 feet in depth on the range, 40 tons of ore were raised, which proved of the most superior quality.

Abundance of good timber and wood are at hand, and the celebrated Spring Hill and Styles coal mining properties are only a short distance away. There is a gradual descent from the farthest extent of the property down to a commodious shipping wharf, from which the ore may be shipped the year round.

Purchasers will be furnished with full particulars on application at

The Critic Office, 161 Hollis St., Halifax.

Valuable Coal Mining Property FOR SALE,

Situated in Cumberland County, Nova Scotia,

AND KNOWN AS THE

Styles Mining Company's Property.

This property consists of five square miles, and is only distant from the celebrated Spring Hill Coal Mines, seven miles. It is on the north side of the Spring Hill coal basin, and the out-crop has been traced for two and a-quarter miles.

Two seams have been developed the upper being 6 feet in thickness, and the lower, which is separated from the upper by a thickness of strata of about twenty feet, being four feet in thickness.

The indications point to the existence of other seams on the property.

The coal is of superior quality, and has been pronounced by consumers the

Best Coal for Domestic Purposes they have ever used.

For Gas and Steam Purposes, it is unequalled.

The late Mr. Hartley, a most efficient member of the Geological Survey of Canada, reported as follows:

"The analyses show the coal to belong to the class known as highly bituminous, in fact, cooking coals in character very similar to those of the North of England, known as North Country, or NEWCASTLE HADLEY COAL."

"The high rate of volatile to fixed combustible matter should render the coal in common with the Newcastle Coal, which it resembles, an admirable gas coal while in the amount of sulphur it falls much below the average of Newcastle Coals, (which contain about nine tenths of one per cent., as determined by the Admiralty Steam Coal Tests), therefore the gas obtained from it should be very easily purified."

"The coke of the coal appears in every way well adapted for iron smelting, as it is firm and rather compact, and in content of ash and sulphur, will compare most favorably with that from any coal in the Province."

"The position of the Styles mining areas is very advantageous in relation to the opening up of the seams, and also of connection with the Intercolonial Railway, which passes within a mile and a-half of the property."

"The Spring Hill Mine is acknowledged to be more advantageously situated for shipping its coal than any other mine now being worked in the Province. The Styles Mine is quite as advantageously situated, and commands the coal markets of Montreal, Quebec, the United States, New Brunswick, Prince Edward Island, and Newfoundland."

"The new tariff has given an impetus to the manufacturers of iron, and as the coke of the Styles seams is specially adapted for iron smelting, the probabilities are that in a few years a home market will be found for most of the output."

Parties desiring to purchase will be furnished with full particulars on application at

THE CRITIC OFFICE, 161 HOLLIS ST.

[FOR THE CRITIC.]

A BLUENOSE ROUQUET.

In my button-hole I wear it,
With my lady friends I share it,
And it is to me far sweeter than the rose;
Though its flower of creamy whiteness,
With a dash of bliny brightness,
From the substance of a rude potato grows.

Thistle, Shamrock, and red Holly,
To compare with this were folly—
And may he who so compares them come to grief;
For no flora in creation
Can deprive it of its station,
Save the Mayflower and the modest Maple-leaf.

Should some non-Bluenose accuse me
Of the whimsical, excuse me
For rattling with some little heat,
That it ill becomes my sour
Critic thus to cut the flower,
While he cuts the parent tuber with his meat!

Search throughout the whole Dominion:
There's no flower, in my opinion,
From whose petals such a wealth of story flows;
But the reason why I took a
Tale bio-som for my bouquet,
Is its intimate relation to my nose.

J. R. H.

[FOR THE CRITIC.]

FRESH AIR IN THE HOUSE.

How many of us ever think of the importance of good ventilation, and the evil effects of the want of it in our homes. Yet the larger part of modern sickness, and especially wasting diseases, are the results of impure air in the house or office.

Probably most of my readers have been often told why fresh air is an absolute necessity for a continuance of health, and many know just how much oxygen a human being requires in twenty-four hours, and how much carbonic acid is inhaled in the same time, but it never seems to strike them how injurious must be the stoppage or reduction of the supply of oxygen, and the increase of the carbonic acid. The great importance of this subject must be my excuse for introducing it here.

The atmosphere consists of about 20 per cent. oxygen gas, and 80 per cent. nitrogen gas, mechanically mixed. The oxygen is the life-giving agent, but is much too powerful to be breathed pure, so the nitrogen is present to dilute it to a proper strength. The average adult breathes about 20 times a minute when at rest, and nearly twice as often when exercising or excited, and at each breath inhales about 20 cubic inches of air, making 400 cubic inches inhaled in a minute.

Let us see what is accomplished by this breathing in of oxygen, which goes in ceaselessly, quietly, and almost unnoticed from the moment of birth to that of death. The blood goes out from the heart a bright crimson color, and passes by the arteries to the extremities of the body, thence it returns charged with carbonic acid and worn out particles of the body, and of a purple hue, by the veins to the lungs. Here it meets the oxygen of the inhaled air, and the animal matter is oxidized and passes out of the lungs as carbonic acid at the next exhalation. The purified blood passes on to the heart to make another circuit and be again purified, and so the process goes on.

The lungs are composed of a number of passages ending in minute air cells, the blood is brought into contact with these cells by innumerable infinitesimally small veins. The oxygen passes into the blood and the carbonic acid out into the lungs by the proper diffusion of gasses, through a thin membrane called *endosmosis* and *exosmosis*. There are estimated to be six hundred millions of these air cells, whose aggregate surface has been stated at from 600 to 1500 square feet, so that, spread out, the lungs of a single person would carpet the floor of a room 30 by 40 feet.

Now, an adult weighing 160 pounds has about 20 pounds of blood, which makes the circuit through the arteries and veins in 15 or 25 seconds. It is evident that if this large quantity of blood is to be purified in this short space of time, the air used must be pure, so as to act as quickly and completely as possible; and we must be particularly careful not to rebreathe air that has been through the lungs already. If we do rebreathe this air already depleted of its oxygen, and charged with carbonic acid and refuse organic matter, it cannot when brought into contact with the venous blood, purify it; consequently the blood goes back to the heart the same dark purple color and carries all its impurities back to the system, instead of the life-giving oxygen. Thus the system becomes clogged with refuse material, and the seeds of consumption, heart-disease, and kindred ailments are sown.

It has been found that the lungs absorb one cubic inch of oxygen at each breath, or twenty cubic inches a minute. As the oxygen is one-fifth of the atmosphere, this shows that each person requires 100 cubic inches per minute to supply oxygen to the system.

Every breath returns to the air one cubic inch of carbonic acid gas, that is twenty cubic inches a minute. Carbonic acid is a rank poison, and it has been found that if it exceeds one part in a thousand in the air its constant inhalation will produce bad effects; hence, 20,000 cubic inches of air at least are necessary to dilute the carbonic acid we breathe out every minute down to a point where it will not be injurious.

There is a great deal of moisture given off from the lungs, which, since it contains the same impurities as the breath, must be largely diluted to prevent its doing harm. It is proved that, at a temperature of 66 degrees Fahrenheit, 1,700 cubic inches of air are required to remove these impurities.