

CAOUTCHOUCINE, or INDIA RUBBER SOLVENT, much wanted, and specimens of American anxiously looked for.

PARRAFIN or WAX.—Sellers at 5d. per lb. buyers at 4d. per lb. for unrefined. Refined 8d. to 9d.

In conclusion, and in return for this, I shall be grateful for any American or Canadian pamphlets or circulars relating to the petroleum, and more particularly for any new facts that may present themselves in those countries. Much has to be done, many sacrifices must be made and endured, in introducing these productions; but by perseverance and merit, undeniable happy results are in the hands of our brethren across the water, and the recipients on this.

As I shall not, in my future circulars, further allude to the chemical component parts, or adaptation of the petroleum, American and Canadian manufacturers and consumers will receive the most interesting and complete information by procuring regularly the past and future numbers of either the *London Journal of the Society of Arts*, or the *London Technologist*.

Most respectfully,
ALEX. S. MACRAE,
Oil and produce dealer, Liverpool.

The Nova Scotia Gold Fields.

The gold of Nova Scotia appears chiefly to exist in certain parallel lines, which probably existed in some instances almost the entire length of the Province, or to the distance of 200 miles in the direction of the strata. The most southerly or seaboard line, embraces the auriferous strata of Wine Harbor, St. Mary's, Tangier, Lawrencetown, Dartmouth, Halifax, the "Ovens," and Lahave. A more northerly line would touch the first "diggings" near the Tangier lakes, Musquodoboit, Laidlaw's farm, and Gold River. The lines still further north are at present almost entirely unknown, and those here laid down may hereafter require adjustment on the map. The idea must not, however, be entertained that gold exists in all the quartz found upon those lines, or at other sites. There are numerous veins of that mineral everywhere that contain no gold, and it requires a practised eye and careful assay to detect it even in rich varieties of the rock.

The metamorphic group of rocks before mentioned as being extensively developed in the main land of Nova Scotia, also appears in Cape Breton Island, where gold at some future time may meet the eye of the careful observer. The same strata flank the mountains of Newfoundland and Labrador. From samples obtained at those places, the writer is inclined to the opinion that auriferous quartz is diffused along a most extended line of the British North American seaboard, and where the strata have been uplifted and entered by eruptive masses and dykes of Plutonic origin.

ASSAY OF GOLD.

An assay of a sample of gold from Tangier gave the following result from 100 parts:—

Gold	96.50
Silver	2.00
Copper	0.08
Lead	0.06
Iron	0.05
	98.69

The Gold from the "Ovens," Lunenburg:—

Gold	93.06
Silver	6.60
Copper	0.09
Iron, a trace.	
	99.75

A sample of gold assayed by J. F. Baker, Esq., Graduate of the Government School of Mines, London, after separation of the larger parts of visible gold, gave 18oz. 2dw. 14gr. of gold per ton,

Containing fine gold	97.3
Silver	2.7

equal to 23.35 carats fine and containing, therefore, of fine gold 17oz. 12dw. 19gr., \$352.66, and fine silver 19dw. 19gr., equal to fifty cents, total \$358.16.—*Dr. Gesner*.

More recently *Dr. Gesner*, the author of the foregoing paragraphs says:—

In the central portions of Nova Scotia there are extensive ranges of granite and other rocks varying in height from 500 to 1,000 feet above the level of the sea. Metamorphic rocks of great thickness lean against the granite, and these are succeeded by the silurian and coal formations and trap rocks. *Dr. Gesner* informs us that "the gold has only been discovered in the metamorphic rocks which touch the granite on one side and the silurian on the other." At Tangier, gold was accidentally discovered, in 1860, in a small stream flowing into the Atlantic about fifty miles from Halifax. Gold is found in this place in quartzite, metamorphic clay, and greywacke. In form it resembles rough, feathery metal obtained by pouring any molten metal among cold water. The average yield of gold to the ton of ore is not stated, but about 600 miners were employed at this place last summer. Seven other diggings were visited, but the description of Tangier would nearly apply to them all, with the exception of "The Ovens," which seems to be a curious place. The name has been given to the locality on account of large and peculiar excavations made in the rocks by the sea. They are formed in a peninsula which is about one mile in length by a half in breadth, jutting out into Lunenburg Bay. The precipices are about fifty feet in height above the water, and the southern side of the peninsula is principally composed of metamorphic slate containing thin seams of quartz in which the gold is found mixed with sulphurets of iron, mispickel and mica. In one of the caves in "The Ovens" considerable quantities of gold have been washed by hand from the sands on its floor. The amount of gold obtained at this place, without machinery, from June to December, 1861, was valued at \$120,000. It varies in size from small spangles up to rough pieces about the size of a walnut. By *Dr. Gesner's* assay Tangier gold contains 96.50 of pure metal and 2. of silver. The gold of "The Ovens" contains 93.06 of gold, and 6.60 of silver.

Of the gold yielding rocks of Nova Scotia, *Dr. Gesner* says:—The Province contains an ample amount of the precious metal to warrant most extensive operations and the construction of machinery for its mining and purification.

Overland Telegraph to India.

The last published part of the Proceedings of the Royal Geographical Society contains Sir Henry Rawlinson's communication on a direct overland