In this country the direction of the denuding force appears to have been from N. 15° W. to S. 15° E. as a mean; there being slight deflections from this course observable in some districts.

ch other,

between

a. This

to south

so curve

which is

ngles of

ticeable

· being

ccupied

sølved.

osition

n; and

ain or

of the

duced angle in the were

ance.

grain

north

vhich

es of the

rface

are

nce,

the

tak-

age

this

d is

nal

ns-

at,

nd

rd

ır-

m

ly

of

18

h

e

ı

Hill.

That the principal part of this abrasion occurred during the drift, or glacial period, does not admit of a doubt; therefore all the gold removed from the rocks must lie somewhere in the direction in which the glacier moved; and this direction can be ascertained, for any particular locality, by observing the direction of the polished grooves and scratches on the surface of the rock in place.

In nearly all deposits of glacial drift, or boulder clay, on the south coast, more or less gold is found; but its economical value is much lessened by its dissemination through tenacious clay—too expensive to work by ordinary means. It is only where the glacial drift has been rearranged that gold can be found sufficiently concentrated to make it worth working.

The close vicinage to the sea of the gold-bearing rocks of the south coast, renders it most likely that the greater part of the gold removed from the rocks by glacial action, is now dispersed through the submarine banks skirting the southern coast of the Province. Perhaps this is proved sufficiently clear by the rock of gold being largely disseminated through the sands of Sable Island, one only point of those banks above the surface of the

In the northern districts, it is most likely that the greater part of the gold liberated may still be found in the drift lying to the southward of those districts; and its presence in the sands of many of the rivers and brocks in the interior, and along the northern coast of the Province, may be regarded as reliable indications of its existence in some of those localities, both in the rocks and in the glacial drift. Those streams, in the greater part of their course, pass over carboniferous and siluriance, in which I failed to discover the existence of any gold; and most having sufficient time for examining the high lands in which they take their rise, I was unable to discover the source from which they obtained it. That they carry it in their drift, from areas in which auriferous strata of the older clay slate and quartzite groups are brought to the surface, is most likely; and that it is obtained there, both from auriferous quartz veins and from glacial deposits, is also likely; but to explore thoroughly the whole of those extensive areas, much time, and most careful observation, will be required.

Winter having put a stop to exploration in 1861, before I had an opportunity of examining the Gold Districts of Waverley, Oldham and Renfrew, I therefore made a hurried exploration of these localities in the early part of the past summer.

The Waverley Gold District, I find, is located on a broad waved anticlinal, with strike nearly cast and west. The strata in which the auriferous quartz beds or seams occur, belong to the quartzite groups, and lie in that formation at the vertical depth of little over half a mile below the base of the clay slate group. In the crown of the arch they have an inclination or dip to the westward of one foot in ten, being raised to that angle by a north and south line of disturbance, which lies some distance to the castward.

But this may not be the angle of inclination of the grain of the rock, and of strata in the crown of the axis of the east and west fold, in every part of this Gold Field. For, in the neighborhood of north and south lines of upheavel generally, dislocations and shiftings, or faults, are of frequent occurrence, often either increasing or diminishing the angle of inclination of the grain of the rock in different sections of the field; thus displaying the east and west quartz veins, in many instances.

Such lines of dislocation are usually found occupied by quartz veins which yield little or no gold, even where it is most abundant in those running east and west, in the planes of bedding of the rock.

Those cross courses cut and sometimes shift the east and west veins in such a manner as to show clearly that they were formed at a much later