

Serby
March 1881

Rio de Janeiro
March 10. 1881

Dr. J. W. Dawson:

My Dear Sir,

I send you
by the same mail with this
a specimen of limestone
which I fancy will prove
much more satisfactory than
any you have before seen
from this country. Unfortu-
nately its exact position is not
known but I am assured that
it is certainly Brazilian and
is probably from the southern
part of the empire in the pro-
vince of Rio Grande do Sul.

I am not quite certain if I
wrote you that limestones are
proving to be much more abundant
in the Brazilian crystalline series
than was formerly supposed.

I have lately got on track of
a great number of localities
in this and the neighboring pro-
vinces which I shall take the
first opportunity of examining.

The beds are of very limited
thickness but if, as may prove
to be the case, the various exposures
represent only one or even two
or three beds, they are wonder-
fully persistent. As I have al-
ready written you the numerous
though widely separated exposures
along the Parahyba valley fall
very nearly in line with the
general direction of the valley and
the very uniform strike. I
have since found an exposure
on the east side of the serra
do Mar some ten or twelve
miles distant, perpendicular to

the strike, from a very similar exposure in the Parahyba valley, the two being separated by a huge monoclinal range. The line of strike from this place prolonged either way passes close to a number of unexamined localities giving a line of exposures parallel to that of the Parahyba. It seems to me within the range of possibilities that we have here but a single bed though this may be difficult of proof. If this should prove to be the case we shall have the long wanted base of reference for the study of the Brazilian crystalline series.

You will be pleased to learn that my friend Prof. Henri Forcisi is doing some very good work on the itacolumite, taberite and so-called

full-schist series of Minas Geras, and
we may therefore hope for some
much needed light on this important
series.

I myself lately made a hurried trip
through the region chiefly interesting in
reference to observations on the relations
of the diamond to itacolomite. The
latter term has been applied to two very
distinct series in the later of which
the diamond occurs apparently like
any other pebble in its second place of
deposit. The original matrix appears to
be vein matter decomposed and un-
determinable but associated with
quartz and slender iron, traversing
the shales which are associated with
the true itacolomite. Both series
are undoubtedly very ancient and
may be Lower Silurian and Cambrian
age. It does not seem probable that
either an Huronian or has some-
times been stated.

Hoping that this time we may have
satisfactory results, I remain
Yours respectfully
Owille A. Derby