

of Stamford, where a great thickness of drift was passed through.

In the bird's-eye view (Pl. I., Vol. I.), the valley of St. David's is represented, for want of more space, as of small width; but it is, in fact, about two miles broad at its mouth, so that it bears no resemblance to the deep narrow chasm in which the Niagara flows. One end of it seems to have terminated originally in an angle at the point where the whirlpool is now situated; and the sections laid open in the gulleys (*c* and *d*, *fig.* 11) show that the walls of the ancient hollow were not perpendicular, but consisted of a succession of precipices and ledges. I was informed that, near St. David's, an outlier of quartzose sandstone, (*a'*, *fig.* 12), was found by boring through the drift, which may, therefore, have projected like an island in the middle of the original valley or channel.

The accompanying diagram will, probably, convey a correct notion of the manner in which the drift rests upon the older rocks near the northwestern end of the valley of St. David's. The outline of the older formation given in this transverse section is, in fact, the same as that presented by the same rocks in those parts of the escarpment east and west of Lewiston and Queenstown, where the face of the cliff is not masked by drift.

I shall afterwards describe cavities, or ancient valleys, intersecting the old Silurian rocks near Quebec, which have been filled up with transported materials, in which marine shells of recent species, and of a northern or arctic character, have been discovered. These shells have also been found in the drift of the