Mr. James Lyons' Report.

Report on the practicability of connecting the Reach above Heely's Falls and the Bay of Quinte by a Canal inland, and using those sections of the River which are at present navigable.

The strong objections against damming the bed of a river in any instance, particularly where there is a strong current, rendered it necessary to make a most careful examination of the country between Heely's Falls and Crow Bay. A ravine was pointed out by the inhabitants which has always been considered practicable, and which is shewn on the plan of this section. In the hope of finding it so, regardless of its distance, I commenced a line of levels, and at a distance of 33 chains and 85 links from the river, arrived at a level 11.76 feet above the top of the dam, and at the distance of 1 min 242 chains and 59 links, obtained a level 51 feet above the same point. I then had to return to the bed of the river.

No. 2.—The plan and section will shew the plan proposed for its improvement; its cost, as per estimate, will amount to £46,255.-10s. 5d., which will carry the navigation to Crow Bay, a very fine sheet of navigable water not less than 10 feet deep at its lowest level. The distance from Heely's to Crow Bay by the bed of the river is 1 mile, 35 chains and 40 links, and the difference of level, lowest water, 79.246 feet.

No. 3.—The next section inland is from Crow Bay to Percy Landing, a distance of 8 miles, 69 chains and 29 links, with a difference of level, 153,102 feet. The shape of the ground selected is admirably adapted, which will appear by an examination of the section; the cuttings and embankments are not great, but entirely through solid rock, and the cost as per estimate, amounts to £112,738 128, 11d.

No. 4.—From Percy Landing the river is made navigable by the lock at Chisholm's Rapids for a distance of about 14 miles, from thence to Widow Harris' it is not navigable, there being two bars with only 3½ feet of water covering them; but, by the improvement embraced in the estimate of the 3rd and following section, its navigation will be made complete; the probable distance is 6 miles, 42 chains and 70 links.

No. 5.—From Widow Harris' to the point near the mouth of the river, where the first lock was originally proposed, (and which is in part excavated from thence towards the river.) a distance of 7