

ment of canals—we shall see successive new structures each outvieing the last in strength, beauty, durability, and of course in cost. We may observe upon the Erie canal where the locks were originally built similar to those upon the lower end of this line, that they are now erecting upon their new work, structures of surpassing strength and beauty, at a largely augmented cost: we find too that after deliberately discussing and gravely weighing, the subject of building their works in a more temporary manner, the Canal Commissioners of New York, have determined upon adhering to their present expensive plan as being naturally the best: and in connection with this matter, in their report to the Legislature of New York, dated January 25th. 1840, they use the following language:

“The commissioners have discovered that to some extent an impression prevails that the plans for the mechanical structures are unnecessarily expensive;

“The experience derived from the use of the canals in this State has pointed out many imperfections. The masonry is too light to resist the powerful influence of the cold weather incident to our climate. Perhaps there is not a single original structure on the Erie or Champlain canal, in which the masonry has not been more or less impaired. The locks first constructed, were generally regarded as combining great strength and durability, but time and experience has shown them to be imperfect.”

Again they say:

“In planning the structures for the enlarged canal, the commissioners were admonished by past experience, of the necessity and importance of giving to every part of them, the requisite solidity and permanence.”

And again:

“If the locks for the enlarged canal had been constructed like those now in use, the cost of the masonry per cubic yard would have been lessened about 50 per cent. and for a short time they might have answered a good purpose: but it is believed that they would soon have become impaired by use, subjecting the navigation to interruptions, and occasioning heavy outlays for repairs.”

Penetrated by the justice of these views I could not recommend to the canal company to resort at this late period of their progress, to temporary expedients, unless their financial condition demands it: yet if the question of finance should necessari-