

PREFACE TO THE SECOND EDITION.

At the urgent and repeated request of Mr Weale, I have consented to accede to his desire to publish a Second Edition of a "Sketch of the Civil Engineering of North America."

A work on American engineering, founded on observations made by me twenty-two years ago, will be apt, I fear, to be regarded as worthless. Such, indeed, was my own conviction when Mr Weale first made the proposal. But after full inquiry and consideration, I have come to a different conclusion. If my observations were calculated to be useful to the profession at the time they were first published, nothing has taken place that should render them otherwise than useful to the younger members of the profession now, and I do not feel justified in withholding my assent to the request of the publisher and proprietor of the first edition of the work, which is now out of print.

The geological features of America, comprehending its sheltered harbours, mighty rivers and lakes, wooded mountains, and boundless prairies, of course remain unchanged, and works which were found applicable to the physical state of the country twenty years ago are obviously applicable to it now. The fact is, that although public works in America have, since my visit, been enormously extended, the principles of engineering construction, with slight modifications,