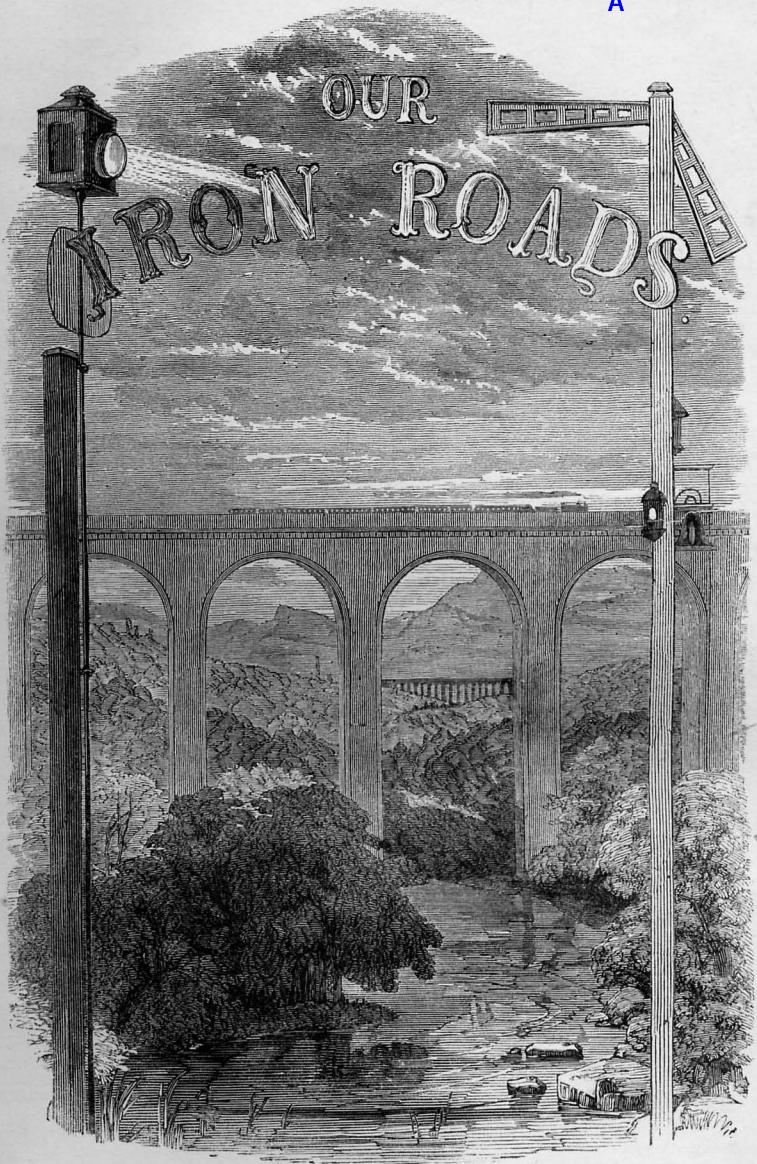




SHAKESPEARE'S CLIFF—SOUTH-EASTERN RAILWAY.



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OUR IRON ROADS:

THEIR HISTORY, CONSTRUCTION,

AND

SOCIAL INFLUENCES.

BY FREDERICK S. WILLIAMS.

With Numerous Illustrations.

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PREFACE.

IT has often been remarked, that it is possible for men to live in habitual contact with the most wonderful and beautiful objects, and yet to be altogether unaffected by their presence. The peasant will dwell beneath the mountain range, whose colossal peaks are covered with eternal snows, without feeling any homage for its grandeur; and multitudes will wander heedlessly upon the shore, unconscious of the sublimity of the ocean. And this principle is true of man's relation to the world of science. We are often as ignorant of its operations as we are familiar with its effects. The blessings which it confers are daily enjoyed, till their amplitude makes us indifferent to the causes and means from which they originate. Such is the case, to a great extent, with that mighty and elaborate locomotive system which has arisen under our own observation, which filled all with admiration, till its wonders were almost too numerous to be appreciated, and yet with the arrangements and operations of which few are acquainted.

With the desire of at once stimulating and satisfying a laudable curiosity in reference to this subject, the present volume has been prepared. In it the author has endeavoured to sketch the rise and progress of the Railway System; to describe the various processes in the erection of the noble and wonderful structures which the formation of our Iron Roads has called into existence; to explain the arrangements which are neces-