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DESCRIPTION OF THE NEW HARBOR, WET DOCK, AND GRAVING DOCK AT AVONMOUTH, BRISTOL, ENGLAND, SHOWING THE MOST MODERN PRINCIPLES OF CONSTRUCTION AND EQUIPMENT OF DOCKS AS ADOPTED IN GREAT BRITAIN.

By A. D. SWAN, M. Can. Soc. C. E.

(To be read before the Ordinary Meeting, 16th December, 1909.)

A glance at the map of England is sufficient to show why hundreds of years ago Bristol became a great port. It largely owes its greatness to its geographical position and natural harbour.

It will be recalled that it was from Bristol that John Cabot, the explorer, sailed in 1497 and planted the flag of England on the coast of North America.

The first graving dock was constructed at Bristol in the year 1625, the dimensions being 100 feet long by 34 feet wide, and it is explained in the ancient records that the dock was made of this large size so as to take in the King's ships.

The construction of the first wharves there was begun on April 27th, 1240, and since then the facilities of the port have constantly improved until they have now culminated in the construction of the great new docks at Avonmouth.

Bristol is situated on the tidal River Avon, which originally flowed through the heart of the city, but in 1809 a new course for the river was formed and the old waterway converted into a floating harbour, which is now equipped with modern wharves, elevators, transit