

and a saving of more than twenty per cent in fuel and repairs was reported to the Admiralty as being effected by the process. The combustion of smoke and the reefing and unreefing of paddlewheels without stopping the engine or vessel, were among Mr. Samuel Hall's various inventions. On these and kindred subjects he labored and thought with extraordinary enthusiasm and devoted constancy, to the extreme close of his protracted life. He had in large measure the true genius of the mechanic, and belonged by nature to that illustrious line which has in all ages bequeathed the heritage of power, and to which the world looks for her most splendid triumphs.

Death of a Distinguished English Inventor.

Mr. Samuel Hall, formerly of Basford-hall, near Nottingham, whose death at the advanced age of eighty-two was recorded recently, has rarely been excelled in his genius for inventions, at once the result of science and the source of improvements in British manufactures. The greatest of these were the gassing of lace and the bleaching of starch—processes essential to the perfection of cotton fabrics. In the gassing process the gas flame was drawn through the interstices of the lace by means of a vacuum produced by an air-pump acting above it. Thus the sheet of lace which entered the flame opaque and obscured with loose fiber issued from it bright and clear, and undistinguishable from the fine linen thread lace of the continent. This beautiful invention excited much interest and drew many visitors, among whom was His Royal Highness, the late Duke of Sussex, who dined at Basford Hall in 1824. Mr. S. Hall belonged to a remarkable family. His father was the first to apply chlorine to the art of bleaching, and his brother was Marshall Hall, the distinguished physiologist and physician. Mr. S. Hall obtained numerous engineering patents, by one of which the steam was condensed, and returned to the boiler by passing it through pipes surrounded with cold water. Thus, the incrustation from the use of sea water was avoided,