

GEOGRAPHY.

THE MANCHESTER SHIP CANAL.—Manchester, England, has, by its great new canal, become a seaport, and is one of the four or five most populous in the world, with a future promise and potentiality beyond all reckoning. The route chosen for the canal was thirty-five and a half miles long, from a point near Eastham, on the Cheshire or southern side of the Mersey, to Manchester. It followed the shore of the Mersey as far as Run-corn, and then pursued an independent route, crossing the Mersey and the Irwell several times before reaching Manchester. The country there is fairly level, but it was found that Manchester stood about seventy feet higher than Liverpool; wherefore it would be needful to have several locks in the canal. For this purpose the whole canal was divided into five levels, or reaches. The first is tidal, and is twenty-one miles long, extending from Eastham to a little above Warrington. Then a huge set of locks raises it sixteen and a half feet, and at that level it runs seven and a half miles further, to Iriam. The second set of locks raises it sixteen feet, to the third reach, which is only two miles long. The third locks, at Barton, raise it fifteen feet, to the fourth reach. Finally, three and a quarter miles further on, the fourth locks raise it thirteen feet, to the fifth and last reach, which is only a mile and three-quarters long and which leads to 114 acres of docks, artificially constructed between Manchester and Salford. Locks at the Eastham end will keep the first or tidal reach at the level of the highest spring tides. The minimum depth of water in the canal will be twenty-six feet, and it can be increased at any time to twenty-eight. The minimum width at the bottom is 120 and at the top 170 feet. It is of

interest to note that the Suez canal is only 26 feet deep and 72 feet wide at the bottom, the Amsterdam canal 23 feet deep and 72 feet wide. The Panama canal was intended to be from 27 to 29 feet deep and from 72 to 79 feet wide. The Manchester canal thus ranks in these dimensions as decidedly the greatest artificial waterway in the world.—*Goldthwaite's Geographical Magazine.*

SIR SAMUEL BAKER.—To some men it is given to make history, to others to make geography. In Sir Samuel Baker we have just lost the last survivor of the band of great explorers who, with no other bond of union than a common enthusiasm, first made their way into the unknown land that spreads over the centre of Africa. The vagueness and mystery of that great gap in our geographical knowledge appealed, perhaps, more strongly to the imagination of the schoolboy than the definite knowledge of lake and tributary, of mountain range and native States, which Livingstone and Burton, Speke and Grant and Baker have put within his reach. But even the schoolboy might forgive additions to his daily tasks if he were sometimes turned loose upon the record of the adventures, hardships, and privations through which Sir Samuel Baker and his wife fought their way to the fountain-head of that great river, whose course, so finely likened by Leigh Hunt to a "grand mighty thought threading a dream," has, from the days of Herodotus to our own, piqued man's curiosity by its mysterious uncertainty. Baker was no foolhardy adventurer, no mere hunter after "big game." He was inspired, as the *Times* leader says, with "that love of work for its own sake, the mere pleasure of