

gained on the Mississippi. Mr. R. A. Molloy's attempt at a theory, as summarised very inadequately in Chapter III, is the first that can be characterised as a scientific generalisation of the river problem that the author has heard of in India. And even this is based on inadequate data, picked up anyhow amidst the multifarious duties falling to the engineer to a system of inundation canals. There is need for a thoroughly scientific location, and for the automatic reading, of gauges at hundreds of places, for several years, along great lengths, selected with care and knowledge, of several of the great Indian rivers, also of some systematisation of the surveys which usually are undertaken on these rivers, and of the making of fresh surveys specially designed to elucidate facts also of an organised system of soundings and sections. The engineers in charge of the work must steadily keep in view the ultimate object of it, and must not make a survey merely for the sake of a section. The object in view will be: To present to the scientific world, and especially to the engineering world, and more particularly to the engineers of structures in India that are

subject to fury at the hands of the great alluvial rivers, under various circumstances, as will allow of such action being anticipated; and especially to enable the engineer to utilise fully his knowledge of the rivers, so that he may make a servant of it, instead of being as it is now very often the case, his master. There can be no doubt at least from the author's point of view that more money has been wasted, for want of just such knowledge as a River Commission might provide, than would have sufficed to pay the entire cost of it many times over. Certainly, so far as training works in connection with bridges are concerned, in rivers of the class with which the author has chiefly concerned himself, most engineers responsible for such works would probably admit that whether they spent money unnecessarily as an insurance against their inevitable lack of scientific data, or that they were unduly economical with either disaster, or heavy annual recurring expenditure in after years, as the result. Thus looked on from the lowest or merely commercial standpoint, the establishment of such a Commission ought to be highly remunerative."

NEWS

ROLLS-ROYCE'S ROLE IN INDIAN AVIATION

One of the major areas of successful Indo-British technological co-operation is the one of civil and military aviation.

British Aerospace and Rolls-Royce have for long been associated with the expansion of the Indian aircraft industry as part of their worldwide international collaborative programs. Whereas British Aerospace has been responsible for bringing the Avro HS748, the Jaguar and the Sea King to India, and for building the wings of Airbus used by Indian Airlines, Rolls-Royce, as Britain's only major aero-engine manufacturer, has been a prominent supplier of

engines for aircraft used in India, as well as a partner in the manufacture of aero-engines.

Rolls-Royce has just announced a major milestone in its 535E4 engine program—the engine (which powers the new 200 seat Boeing 757 competing for Indian Airlines' short-haul/medium capacity requirements) has been awarded its full engine type certificate for passenger-carrying operations by the British Civil Aviation Authority a month earlier than planned by Rolls-Royce and 13 months sooner than originally scheduled—(*British Industrial News*, No. 144, January 1984, p. 37).