10,000 cubic yards, at a cost of \$4,000, and would hold 6,750,000 gallons of water. An evaporation of five feet in depth per annum, removing 2,800,000 gallons, would leave 3,950,000 gallons for the use of the sheep, — enough for one year, and perhaps eighteen months. To carry the sheep through a possible drought of three years, a tank of twice the capacity would be required.

In a recent number of the London Times appears more evidence of the interest of England in the conquest of Burmah, that a good trade-route with western China may be opened. After referring to the misguided ways of King Thebaw, who is held up as a weak individual, guided by a few illadvised ministers of state, the Times refers to the future of the country in these words: "Whatever may have been the influences round King Thebaw, they cannot much affect the future of his kingdom. Mr. Bernard, the chief commissioner, will, it is stated, proceed at once to Mandalay, with a party of officials acquainted with the Burmese language. For the present, General Prendergast will administer the country. But when Mr. Bernard arrives, civil authorities will take charge of it, and rule it in the name of the empress of India. The question seems to have been carefully studied, and there seems to be no difficulty in framing a temporary organization for governing Upper Burmah. Our efficient Indian civil service is not to be embarrassed by the acquisition of a new province."

## RAILWAYS IN BURMAH.

Mr. Holt S. Hallett recently addressed the members of the Scottish geographical society, his subject being 'A survey for railway connections between India, Siam, and China.' The conquest by England of Upper Burmah places the Burmese Shan states under her protection, and thus allows their peaceful and trade-loving inhabitants to expect a better commercial connection with that country. England is now placed in such a position that no political hindrance remains to prevent her driving the iron horse up to the gates of China, and opening up to trade the western provinces of that rich and prosperous empire. For the past four years Mr. Colquhoun and Mr. Hallett have deeply interested themselves in the subject of the expansion of trade by linking China and the intervening countries to India by means of railways. The valley of the Irrawaddy is bounded on the west by a range of hills which, as it proceeds southwards, spreads out into an entangled mass,

touching the sea along the Bay of Bengal with many of its spurs. No railway can therefore be constructed, except at a prohibitive cost, from Calcutta along the seaboard towards Rangoon. Through the pass used by the Burmese in their invasion of Assam, there is a route which would suit admirably for carrying a railway from the Brahmapootra valley into the valley of the Irrawaddy, and then the railway could be joined, without meeting any great difficulties, to the Rangoon and Tonghoo line, having its present terminus at Rangoon. The height of the pass is not more than 2,500 feet above the sea-level, or 2,000 feet above the level of the Brahmapootra valley.

Owing to the many ranges that would have to be crossed, a railway constructed to connect any part of the Irrawaddy valley in Upper Burmah, or Lower Burmah to the north of Beeling, with western China, would be of greater length and considerably more costly than a line (proposed by Mr. Hallett) which has its terminus at Maulmain.

In considering the traffic which would be likely to arise from the construction of railways through the centre of Indo-China, Mr. Hallett said: "It will be well to remember, 1°, that although the population of our possessions in British Burmah is only 1-40th of that of our Indian dominions, vet British Burmah has 1-10th of the whole trade of India; 2°, that Upper Burmah, which since the rebellion of the Burmese Shan states has scarcely a million of inhabitants, still carries on a trade with us of about £3,000,000 sterling; 3°, that a million sterling of treasure is imported into Burmah each year more than is exported; 4°, that Chinese emigration has been shut out lately from America, Australia, and other places, and would certainly set into the fertile plains of Indo-China if it were encouraged and facilitated by the construction of railways; 5°, that already half the population in the delta of the Meh Nam is composed of Chinese and their descendants; 6°, that the great want of British Burmah is population."

The paying prospects of the proposed railways can be compared with those of the railway between Rangoon and Prome, which was opened in 1878. This railway, which is 162 miles in length, was made to connect the town of Prome with the seaport of Rangoon. It passes for fully two-thirds of its length through an unfertile country covered with scrub jungle. On the whole length of the railway there are not more than six villages, and the line is in competition with the admirable flotilla of steamers plying on the Irrawaddy River. Yet this line paid to the English government a net profit of 6 per cent last year upon the expenses of its construction.