

connect this semaphore by a telephone cable with the telegraph cable of Martin Garcia, so that communication may be established between the ships lying at anchor (waiting for the tide or passing near the semaphore) and the offices of the agents at Buenos Aires or Monte Video.

“A careful study of the different conditions in the delta of the La Plata shows that the only method of improvement in such a vast expanse of water is by dredging and buoying the best channels. In the lower Rio de la Plata there are very serious conditions. A bar on which there is a least depth of 20 ft. at low tide lies between the anchorage of Buenos Aires and Monte Video. The material in this bar is very soft, and vessels plough their way through it on ordinary tides, but the great extent of the bar is the serious condition. Between the 24 ft. curves straight through this bar there is a distance of 24 sea miles. To make a channel by dredging would require the removal of probably ten and a half to thirteen million cubic yards; and it is very doubtful if, on such broad extension of water and in such soft material, a channel could be maintained. But it is hoped that the plan now proposed of anchoring five lightships in the line of navigation and in the direction of the current, and which can be seen from each other, will have an effect upon the bar by the continued movement of deep steamers through it. The examination of the Rio de la Plata Inferior has been intrusted by the Government to the Ministry of Marine, which is making very extensive surveys and examinations over the entire area.

“The estuary at this point is forty-six miles wide, and five high towers on shore and others anchored within the area to be surveyed are necessary in order to cover this great Punto Indio bank.”

“These are the general physical conditions of the Rio de la Plata and its great tributaries.

“The very important project of making a deeper channel of access to the Port of Buenos Aires and enlarging the port, to give it not only a greater area and more facilities, but greater depth in the enlarged part, is now before the Government, and the plans for it (made by myself) have been approved. There are alternate projects to meet the commercial necessities of the country: one is to deepen the present Port of La Plata and endow it with more facilities, where vessels drawing 24 ft. or 25 ft. may come in and go out at any stage of the tide; or to build a deep-water port, with a depth of not less than 30 ft., on the seaboard outside of the difficult conditions of the Rio de la Plata. A concession has been granted and the project submitted to the National Government for an artificial port in the great bay of Samboronoon, which is nearly opposite Monte Video, and another concession for a port at Mar Chiquita, near Mar del Plata on the ocean, has also been granted.

“In addition to the great drainage basin of the La Plata, there are further south the large rivers Rio Negro and Colorado, which, combined, have a drainage-area of 464,000 square miles. The channels are not susceptible of improvement for a large commerce, but they will in the future furnish water for an extensive irrigation and steamboat navigation.”

MEASURES, WEIGHTS, VALUES, ETC.

Owing to the fact that I did not have the time to figure, or, rather, convert all the statistics which I have quoted from the Spanish metric system into English, I quote the following particulars:—

Measures.

Miles and Kilometres.—8 kilometres = 5 miles approximately (4·971 miles); 100 kilometres = 161 miles approximately (160·932 miles).

Acres and Hectares.—1 hectare = $2\frac{1}{2}$ acres approximately (2·471 acres).

Argentine “Baras” and Yards.—100 “baras” = 97·70 yards.

A metre = 39·37 English inches.

Weights.

Argentine Ton and English Pound.—1 Argentine ton = 2,025·60 lb.

Argentine Ton and Argentine Pound.—1 Argentine ton = 2,000 lb.

Argentine Ton and Kilogrammes.—1 Argentine ton = 918·80 kilogrammes.

One hundred kilos. (called a “quintel” or “fanega” in Spanish) is 220 lb. in English = 3·67 bushels of 60 lb.

One hundred kilos. is an Argentine ton.

2,205 lb. in English = 4·6 quarters of 480 lb.

Values.

£1 sterling (*lira esterlina*) has the fixed value of \$5·04 Argentine gold (*calle pesos “oro sellado”*). The gold dollar in August, 1903, was of 127·27 per cent., or, in other words, \$100 gold was equivalent to \$227·27 currency.

APPENDIX D.

E.—WORKS OF REFERENCE.

THE following commercial publications are on hand at the Head Office of the Industries and Commerce Department, and are available there for public reference:—

Ceylon Handbook and Directory for 1902.

Canadian Trade Index. 1901.

South African Trade. General. By T. Nichol Jenkin. 1902.

South African Trade. Engineering. By Ben. H. Morgan. 1902.

South African Trade. Textile and Soft Goods. By S. W. Witham. 1903.