FOURTH AWARD OF THE ENGINEER-UMPIRE, UNDER THE CONVENTION BETWEEN COSTA RICA AND NICARAGUA OF 8 APRIL 1896 FOR THE DEMARCATION OF THE BOUNDARY BETWEEN THE TWO REPUBLICS, DECISION OF 26 JULY 1899[*]

QUATRIÈME SENTENCE ARBITRALE RENDUE PAR LE SURARBITRE INGÉNIEUR, EN VERTU DE LA CONVENTION ENTRE LE COSTA RICA ET LE NICARAGUA DU 8 AVRIL 1896 POUR LA DÉMARCATION DE LA FRONTIÈRE ENTRE LES DEUX RÉPUBLIQUES, DÉCISION DU 26 JUILLET 1899[**]

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Fourth Award made to Greytown, July 26, 1899,
in the question of the limit between Costa Rica and Nicaragua.

As the arbitrator of whatever points of difference may arise between your two bodies in tracing and marking the boundary lines between the Republics you represent, I am called upon to decide the following question:

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[*] Reprinted from H. La Fontaine, *Pasicrisie Internationale: Histoire Documentaire des Arbitrages Internationaux (1794-1900)*, Imprimerie Stampelli & CIE, Berne 1902, pp.-535-537. (Only one of the maps mentioned in this award is reprinted)

[**] Reproduit de H. La Fontaine, *Pasicrisie Internationale: Histoire Documentaire des Arbitrages Internationaux (1794-1900)*, Imprimerie Stampelli & CIE, Berne 1902, pp. 535-537.

What level of its waters shall be taken to determine the shore line of Lake Nicaragua, parallel to which and 2 miles distant therefrom the boundary line must be traced, from near the San Juan River to the Sapoa?

It will facilitate discussion to define in advance the principal levels which must be frequently referred to. Under the influence of rainy seasons of about seven months and dry seasons of about five the level of Lake Nicaragua is in constant fluctuation. We shall have to discuss five different stages.

First. Extreme high water, the level reached only in years of maximum rainfall or some extraordinary conditions.

Second. Mean high water, the average high level of average years.

Third. Mean low water, the average low level of average years.

Fourth. Extreme low water, the lowest level reached in years of minimum rainfall or other extraordinary conditions.

Fifth. Mean water, the average between mean high water and mean low water.

The argument presented to me in behalf of Nicaragua claims that the level to be adopted in this case should be the first level named, to wit extreme high water. It argues that this line and this alone, is the true limit of what the argument calls the bed of the lake. Costa Rica claims the adoption of the third level, to wit, mean low water. This is argued principally upon two grounds: First, it is shown by a great number of legal decisions that in most States all water boundaries are invariably held to run at either extreme or mean low water. Second, it is claimed that in case of any doubt Costa Rica is entitled to its benefit, as she is conceding territory geographically hers.

I will begin with Costa Rica's first argument. The equity of adopting a low water line in the case of all water boundaries is readily admitted, even though instances of contrary practice exist.

Between all permanent lands and permanent waters usually runs a strip of land, sometimes dry and sometimes submerged. We may call it, for short, semisubmerged. Its value for ordinary purposes is much diminished by its liability to overflow, but, as an adjunct to the permanent land, it possesses often very great value. If the owner of the permanent land can fence across the semisubmerged he may save fencing his entire water front. He also can utilize whatever agricultural value may be in the semisubmerged land in dry seasons. Both of these values would be destroyed and wasted if the ownership were conferred upon the owner of the water. Therefore equity always and law generally, confers it upon the owner of the permanent land.

I recognized and followed this principle in my award No. 3, where I held that the boundary line following the right bank of the San Juan River, below Castillo, follows the lowest water mark of a navigable stage of river. And, if now the lake shore were itself to be the boundary of Costa Rica, I would not

hesitate to declare that the semisubmerged land went with the permanent land and carried her limits at least to the mean low water line.

But this case is not one of a water boundary, nor is it at all similar, or on all fours with one, for none of the equities above set forth have any application. It is a case of rare and singular occurrence and without precedent within my knowledge. A water line is in question, but not as a boundary. It is only to furnish starting points whence to mesure off a certain strip of territory. Clearly the case stands alone, and must be governed strictly by the instrument under which it has arisen. That is the treaty of 1858, and its language is as follows:

> "Thence the line shall continue toward the river Sapoa, which discharges into the Lake Nicaragua, following a course which is distant always 2 miles from the right bank of the river San Juan, with its sinuosities, up to its origin at the lake, and from the right bank of the Lake itself up to the said river Sapoa, where this line parallel to the said bank will terminate."

The principles, upon which the language and intent of treaties are to be interpreted, are well set forth in the Costa Rica argument by many quotations from eminent authors. All concur that words are to be taken as far as possible in their first and simplest meanings — "in their natural and obvious sense, according to the general use of the same words", "in the usual sense, and not in any extraordinary or unused acceptation".

We must suppose that the language of the treaty above quoted suggested to its framers some very definite picture of the lake with its banks and of the 2 miles strip of territory. It evidently seemed to them all so simple and obvious that no further words were necessary. Let us first call up pictures of the lake at different levels and see which seems the most natural, obvious and reasonable.

The very effort to call up a picture of the lake at either extreme high water or at extreme low water seems to me immediately to rule both of these levels out of further consideration. Both seem unnatural conditions, and I must believe that had either been intended, additional details would have been given.

Next, is the mean low water mark the first, most obvious and natural picture called up by the expression "the bank of the lake"? It seems to me decidedly not. During about eleven months of the year this line is submerged, invisible and inaccessible. It seems rather a technical line than a natural one. The idea of a bank is of water limited by dry land with some elements of permanency about it. Even during the brief period when the line is uncovered the idea of it is suggestive far more of mud and aquatic growths than of dry land and forest growths.

To my mind, the natural, simple and obvious idea of the bank of a lake in this climate is presented only by the line of mean high water. Here we would first find permanent dry ground every day of an average year. Here an observer, during every annual round of ordinary seasons, would see the water

advance to his very feet and then recede, as if some power had drawn the line and said to the waters, "Hitherto shalt thou come, but no further". Here the struggle between forest growths and aquatic vegetation begins to change the landscape. Here lines of drift, the flotsam and jetsam of the waves, naturally suggest the limits of the "bed of the lake".

One level of the lake remains for discussion, the mean level, or average of all waters. In a different climate, where the rainfall is more uniformly distributed throughout the year, the mean high water and mean low water lines, with all their respective features, would approach each other, tending to finally merge in the line of mean water. But, where wet and dry seasons prevail, as in the present case, the line of mean water is destitute of all obvious features, and is submerged for many months of the year. It is purely a technical and not a natural line, and is not to be understood where not expressly called for.

In argument against Nicaragua's claim of the extreme high water line, Costa Rica appeals to the general custom of geographers and scientific men in making ordinary topographical maps, who never adopt the extreme lines of overflows for the outlines of lakes. This argument of general custom has great weight but it is equally against Costa Rica's claim for the mean low water line. Wherever wet and dry seasons prevail, general custom treats mean high water as the normal state, always to be understood where no other level is expressed, and the line is assumed as the lake boundary in all ordinary topographical maps. Two quotations from Commander Lull's report of his Nicaraguan Canal survey will illustrate "Report Secretary of the Navy, 1873, p. 187":

> "In a survey made by Mr. John Baily, many years since, that gentleman professed to have found a pass with but 56 feet above the lake level, but the most of his statements are found to be entirely unreliable... For example, he finds Lake Nicaragua to be 121 feet above mean tide in the Pacific, while the true difference of level is but 107 feet." (Ibid., p. 199.)
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> "The surface of Lake Nicaragua is 107 feet above mean tide in either sea."

From comparison of this level with the levels found by other surveys, there is no question that this figure was Lull's estimate of mean high water, as shown by his line of levels.

From every consideration of the lake, therefore, I am driven to conclude that the shore line of the lake contemplated in the treaty is the mean high water line.

I am led to the same conclusion also from the standpoint of the 2 miles strip of territory.

The treaty gives no intimation as to the purpose of this concession, and we have no right to assume one, either political or commercial. We have only to observe the two conditions put upon the strip in the treaty. Under all ordinary conditions it must be land, and 2 miles wide. This would not be the case if we adopted the line of either mean low water or mean water. In the

former case the strip would be too narrow for about eleven months of an ordinary year: in the latter case for about five months.

Without doubt, then, I conclude that mean high water mark determines the shore of the lake and it now remains to designate that level and how it shall be found.

Several surveys of the proposed Nicaraguan Canal route besides that of Commander Lull above quoted, have been made within the last fifty years. Each found a certain mean high level of the lake, and it might seem a simple solution to take an average of them all, but, as each adopted its own bench mark on the ocean and ran its own line of levels to the lake, I have no means of bringing their figures to a common standard. It seems best, therefore, to adopt the figures of that one which is at once the latest and most thorough, which has enjoyed the benefit of all of the investigations of all of its predecessors, and whose bench marks on the lake are known and can be referred to. That is the survey, still in progress, under the direction of the United States Canal Commission. Its results have not yet been made public, but, by the courtesy of Rear Admiral J. G. Walker, President of the Commission, I am informed of them in a letter dated July 10, 1899, from which I quote:

> "In reply I am cabling you to-day as follows: 'Alexander, Greytown, six,' the six meaning, as per your letter, 106 as mean high level of lake. This elevation of 106 is, to the best of our knowledge (Mr. Davis, our hydrographer) the mean high water for a number of years... The highest level of the lake in 1898 was 106.7, last of November. The elevation of our bench mark on inshore end of boiler at San Carlos is 109.37."

A complete copy of this letter will be handed you and also blue prints of the maps made by the Commission of the lower end of the lake, which may facilitate your work.

As this Commission is the highest existing authority, I adopt its finding and announce my award as follows:

The shore line of Lake Nicaragua, at the level of 106 feet, by the bench marks of the United States Nicaragua Canal Commission, shall be taken as the bank of said lake referred to in the treaty of 1858[1].

[1] *Monthly Bulletin of the Bureau of the American Republics*, 1899, vol. VII, p. 877.