General W. C. Gorgas and in recognition of his achievements in preventive medicine, Dr. Belisario Porras, president of the Republic of Panama, has proposed the foundation of an institute of tropical and preventive medicine in connection with the Santo Tomás Hospital at Panama. Pending the erection of a permanent building it is planned that the institute shall comprise a well-organized laboratory for research in tropical diseases in the Santo Tomás Hospital. After the laboratory has been established it is contemplated to organize a school of tropical medicine. As it is the wish of President Porras that the institute be a contribution of the Republic of Panama to the memory of General Gorgas, the project will be financed by the Panamanian government. Although the work of the institute will be largely in the interests of the countries of Central and South America, it is hoped that its activities will give it an international scope and that it will have the active cooperation of leaders in tropical and preventive medicine. At a meeting held in Washington, January 31, a provisional board of directors for the United States was appointed, including Admiral William C. Braisted, M. C., U. S. Navy, chairman; Dr. Leo S. Rowe, director of the Pan-American Union: Surgeon-Generals Ireland, Stitt, and Cumming of the Army, Navy and Public Health Service, respectively; Hon. J. E. Lefevre, chargé d'affaires of the Republic of Panama, in Washington, and Hon. John Bassett Moore, legal representative. A similar board will be named to represent the countries of Central and South America.

UNIVERSITY AND EDUCATIONAL NEWS

THE Smith-Towner bill, creating a Department of Education and providing federal aid to the states for the promotion of education, has been favorably reported by the House Committee on Education.

THE first Congress of the Universities of the British Empire was held in London in 1912 when all, to the number of fifty-three, were represented. It was decided to hold the congresses every five years, but the war made it impossible to do so in 1917. The second congress will accordingly be held in the summer of 1921. The number of British universities has in the meantime increased to fifty-eight. From July 5 to 8, the representatives will be entertained by Oxford University.

PROFESSOR C. E. HORNE, of the University of Porto Rico, has been appointed dean of the college of agriculture and mechanical arts at the University of Mayagüez, P. R.

RICHARD HAMER, M.A. (Toronto), formerly assistant professor of physics at the Carnegie Institute of Technology, Pittsburgh, has accepted a Whiting fellowship at the University of California where he is now engaged in research on the "Photo-electric effect."

Professor Frank Lincoln Stevens, of the University of Illinois, has been appointed Bishop Museum fellow at Yale University for the next university year. Dr. Oskar Baudisch, formerly of the University of Zurich, has been appointed research associate in the university for next year on the recommendation of the department of chemistry, approved by the board of permanent officers of the graduate school. Dr. Baudisch's publications include "The assimilation of inorganic nitrogenous compounds by plants," "The theory of color lakes" and "Complex iron salts."

DISCUSSION AND CORRESPONDENCE ON A BOTTLE WHICH DRIFTED FROM THE GULF OF MAINE TO THE AZORES

In a previous note¹ the writer has referred to certain drift-bottles set out in the Bay of Fundy for the purpose of investigating the movements of the water there. Some of these bottles were found on the shores of the Gulf of Maine and indicated by their drift a superficial circulation of the water in the Gulf. Since writing the note one of the bottles set out last year off the coast of New-Brunswick has been returned from the Azores. The bottle was set out on August 29, 1919, one mile southeast of Point Lepreaux on the New

¹ SCIENCE, N. S., Vol. LII., No. 1349, November 5, 1920, page 442.

Brunswick coast (Lat. 45° 3' N., Long. 66° 28' W.) and was found on August 8, 1920, on the shore at "Ponta Delgada, Flores, Azores" (apparently Delgada Point of the Hydrographic chart, Lat. 39° 31' N. Long., 31° 13' W., and not Ponta Delgada, San Miguel). Flores is one of the northwestern islands of the Azores and Delgada Pt. is its northmost point. It would therefore seem from the position in which the bottle was found that it had approached the Azores from the north or northwest. The bottle was of heavy glass and closed with a paraffined cork. It contained a Canadian postcard, offering a reward to the finder who wrote on it the time and place of finding. Set out at the same time were 99 other similar bottles and they were set out in a line from Point Lepreaux to Gulliver Hole, on the Nova Scotia Coast. A bottle set out about a mile away from the one found in the Azores was picked up on Cape Cod.

From the known drift of other bottles in the Gulf of Maine it seems probable that the bottle which was returned from the Azores passed southwestward in the Gulf of Maine and passed Cape Cod into the Atlantic and further that the bottle took about two and one half months to reach the water near Cape Cod. Without doubt the bottle encountered the "Gulf Stream" and was carried across it to its eastern and southern side as the "Gulf Stream" swings round the North Atlantic. The time taken by the bottle to go from the American coast to the Azores was probably not more than nine and one half months.

It is interesting to compare the drift of this bottle with that of one recorded in the *To-ronto Daily Star*, November 1, 1920.²

A bottle cast into the Atlantic Ocean near Newfoundland by Sergeant D. McInnes, of Edmonton, when returning to Halifax, September, 1919, after shooting at Bisley, reached Nieuport, Belgium, last August.

This bottle undoubtedly traveled in the western and northern edge of the "Gulf

² For this citation the writer is indebted to Miss Rigby of the staff of the Atlantic Biological Station,

Stream" and took about the same time to cross as the other bottle.

The drift of these bottles may be further compared with the drift of derelicts3 in the North Atlantic and especially with the wellknown drift of the schooner Fannie E. Wolston which was adrift for at least two and a half years and was observed over thirty times. She was observed at sea in Lat. 36° N., Long. 74° W. (northeast of Cape Hatters) on December 15, 1891, and four times afterwards on her way across the Atlantic in an easterly direction until she reached Lat. 35° N. and Long. 39° W. on June 13, 1892, having drifted in the six months about four fifths of the way from the American coast to the Azores. After reaching this point she circled in the Saragasso Sea and returned by a southern route to the American coast.

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AN ADJUSTABLE EMBOUCHURE

To the Editor of Science: I am much interested in Professor Barus's article on "An Adjustable Embouchure" (which the types have made "embouchuer") appearing in Science for January 14, which has just come to hand. I think he did not see my instrument, exhibited at the meeting of the National Academy of Sciences and at the meeting of the American Physical Society in 1919, which I less modestly called "an artificially played brass instrument," and which I claimed worked exactly upon the principle of the human lips. except that it lacked their softness. In it a light piston, like a safety valve, with mass like the lips, was lifted from its seat by the air pressure, letting a puff of air into the wind instrument, while the potential energy (elasticity of the lips) was furnished by a wire under adjustable tension. The pulse being reflected at the mouth of the horn (see my paper in Proc. Nat. Acad. Sci., July, 1919) comes back, and if it arrives in the right place,

3 "Wrecks and Derelicts in the North Atlantic Ocean," 1894, U. S. Hydrographic Office.