

It would be interesting to test the strength and endurance of perfectly fresh specimens under normal, sea conditions.

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THE FIRST FREE-LIVING FRESHWATER JELLYFISH FROM SOUTH AMERICA

THIS past March, Mr. German Frick, an engineer residing in Santiago, Chile, was much surprised to see jellyfish moving about in a small body of fresh water in Tranque Marga-Marga, near Quilpué (Province of Valparaíso), 40 kilometers from the sea. Seeking more information about them, he took several of them to the senior author who, in turn, appreciating the uniqueness of the discovery, forwarded the specimens to the U. S. National Museum, along with a very realistic, original sketch of the animals.

A comparison with preserved material in Washington readily permits the identification of both sketch and specimens with the well-known widely distributed *Craspedacusta sowerbii* (Lankester). This species has heretofore been reported from Europe (Austria, Czecho-Slovakia, England, France, Germany, Holland, Poland and Russia), Asia (China and Japan), the Hawaiian Islands, twenty of the United States of North America, Panama (in the Canal Zone near Barro Colorado Island) and from an aquarium only at Porto Alegre, Brazil.¹ The present record, however, is the first for the free-living freshwater medusae in South America.

The medusae varied from 5 to 10 mm in diameter. They were much disintegrated after their long voyage to North America. There were at least five series (sizes) of tentacles, and probably seven in the largest specimen; the smallest specimen had only four series.

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DEFORMATION OF ROCK STRATA BY EXPLOSIONS

A RECENT note by Boon and Albritton¹ mentions the Sierra Madera Dome of western Texas as an example of a structure which might possibly have been formed by explosion from a meteoric impact.

It happens that in the course of a routine gravity survey in Pecos County, Texas, stations were made on and around Sierra Madera. The results of this work have been indicated in another connection in a

¹ Rudolf Gliesch, *Egatea*, 15: 145-148, figs. 1-11. Porto Alegre, Rio Grande do Sul, 1930. Gives notes on occurrence of both polyps and medusae in an aquarium at Porto Alegre; *Microhydra* is synonymous with *Craspedacusta*.

² J. D. Boon and C. C. Albritton, Jr., *SCIENCE*, n.s., 96: 2496, 402, October 30, 1942.

paper by Hammer.² The gravity work indicates a positive gravity anomaly with a relief of about 3.5 mg.³ Presumably if the geologic structure were caused by a meteoric impact, the only explanation for the positive gravity anomaly would be excess mass brought in by the meteor. The form and width of the gravity anomaly can be accounted for by a concentrated (*i.e.*, spherical) mass with its center at a depth of the order of 8500' and with a total excess mass of the order of 4×10^{15} grams. If it were assumed that this were a sphere of meteoric iron, the required diameter would be about 3000'. The gravity anomaly is quite well centered over the topographic feature and therefore the excess mass must be substantially vertically below the surface geologic feature.

The depth and mass required to explain the gravity anomaly both seem much too large to be associated with a meteorite. Therefore, the geophysical contribution makes it seem much more probable that this feature is caused by igneous intrusion or some other more ordinary geologic processes rather than being the result of a meteoric explosion.

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SEGREGATION OF TYPE SPECIMENS

THE result of inquiries made by a committee of the Systematic Section of the Botanical Society of America and the American Society of Plant Taxonomists shows that of about 76 North American herbaria known to contain type specimens, 23 keep their types segregated from the main collections. In 8 of these, including the U. S. National Herbarium, Gray Herbarium, New York Botanical Garden, Philadelphia Academy, Rocky Mountain Herbarium and the herbaria of the Universities of Pennsylvania, North Carolina and Arizona, the segregation is in progress, but not complete. The Los Angeles Museum has its types stored in a vault in the interior of the country for the duration of the war. The U. S. National Herbarium is preparing to move its type collection to a safer location during the war, but this has not yet been accomplished. The New York Botanical Garden is in the midst of the process of segregation, and as the types are removed from the main collection, they are being sent to an institution in a safer locality.

About 20 of the collections containing types are housed in buildings which are not fireproof. This includes such important herbaria as the U. S. National Herbarium, the Bailey Hortorium and the Arthur Herbarium of rust fungi at Purdue.

What the above means is that in at least 20 American herbaria types are exposed to the risk of fire,

² Sigmund Hammer, "Terrain Corrections for Gravimeter Stations," *Geophysics*, 4: 3, 187, July, 1939.

³ 1 mg. = 1 milligal = .001 cm/sec.²