Living under these arrangements, the party was enabled to secure excellent meals at a very low cost. Besides the work in the Canal Zone proper, the members of the survey made trips into the neighboring territory in search of specimens and data not available within the actual bounds of the zone, but obtainable in the same faunal area or an adjoining one. One of these expeditions carried the party into the Darien country and along the banks of the Rio Tuyra, which lies on the Pacific side of the isthmus about 150 miles distant from Panama. The fauna of this country was found to differ considerably from that of the Canal Zone. The fish collectors, unlike those concerned with some other classes of animals, find it impracticable to classify their specimens while in the field, and for this reason it is difficult to say just what has been obtained, other than that a good-sized collection was made, fully as large as that of last year. The fish were caught in nets and traps of several kinds; often in great numbers, the collectors selecting the best and most desired specimens which are at once prepared and packed in tanks for shipment to the National Museum. Among the different kinds of salt-water fishes secured were sharks, tarpon, jew-fish, snappers, groupers and croakers. There were also many of the cat-fishes which are so very abundant on the Pacific slope and along the coast of Panama. The collectors point out the special value of this survey in so far as concerns the fish fauna which will become completely changed and intermixed when the canal is finished, and the waters of the inland lakes and the two oceans become intermingled. As is well known, many salt-water fishes ascend fresh-water streams for long distances, and it is now seen that in this manner many will doubtless find their way to the great Gatun Lake. Some will probably remain here, while others will pass on into the ocean. At present the fish faunas of the Atlantic and Pacific slopes and the two coasts of the zone appear well defined, but it is believed that a subsequent survey, in from five to ten years time, will reveal great changes.

UNIVERSITY AND EDUCATIONAL NEWS

THE late Dr. Francis Bacon, a physician of New Haven and connected with the Yale Medical School, has bequeathed $100,000 to the New Haven County Antituberculosis Society. He has made Yale University his residuary legatee, the bequest to be used as a scholarship fund in the college.

MR. A. W. OPPENHYM, of New York, by his will created a trust fund of $275,000, which at his widow's death shall go in equal parts to the Mt. Sinai Hospital, the German Hospital and Columbia University. It is provided that the Columbia University fund is to be used for the research into the cause, prevention and cure of cancer.

MR. JOHN TATLOCK, of New York, has given to Columbia University a collection of astronomical works consisting of 261 volumes and about 1,200 pamphlets.

AGRICULTURAL HALL, just built by the University of California at a cost of $200,000 to house some portion of its teaching and investigating in agriculture, will be completed by commencement, May 15, 1912. This new white granite building, roofed in red mission tile, and picturesquely set on an eminence looking south toward the Dana Street entrance to the campus, is one of the permanent buildings of the Phoebe A. Hearst plan. It is fireproof in construction, with steel frame and concrete floors and roof.

THE bill appropriating two hundred and fifty thousand dollars for the development of work in public health and medicine at the site of the University of Illinois in Urbana-Champaign, failed of passage in the special session of the legislature. Although only four votes were recorded against it; yet owing to the fact that at a special session a two-thirds majority is necessary to pass an appropriation bill, involving in this case thirty-four votes, and at no time were more than thirty-five members present, it made it possible for even two votes to defeat the bill. The trustees will renew their request for an adequate appropriation for scientific work in medicine at the next session of the legislature.

PROFESSOR GORDON H. TRUE has been appointed director of the Nevada Experiment Station, at Reno.

DR. ARTHUR B. LAMB, professor of chemistry and director of the Havemeyer Chemical Laboratory of New York University, has been appointed assistant professor of chemistry at Harvard University. Professor Solon I. Bailey has been promoted to the Philips chair of astronomy vacant by the retirement of Professor Arthur Searle, and Dr. Charles Palache has been promoted to a full professorship of mineralogy.

DR. IRA W. HOWERTH, of the University of Chicago, has been appointed professor of education and director of university extension in the University of California. Dr. J. C. Merriam has been promoted to a full professorship of paleontology.

DR. W. M. CONGER MORGAN, assistant professor of chemistry at the University of California, has been appointed professor of chemistry in Reed College.

DR. FRANZ DOFLEIN, associate professor of zoology at Munich, has been called to the chair of zoology at Freiburg.

DISCUSSION AND CORRESPONDENCE

NON-EUCLIDEAN GEOMETRY IN THE ENCYCLOPÆDIA BRITANNICA

THE sixth heading under the word Geometry is Non-Euclidean Geometry. The article is by Whitehead and Bertrand Russell, the best men in England to have written it, and is worthy this one of the three greatest works of reference in the English tongue, the others being Murray's dictionary and the Century.

It begins:

A short historical sketch will . . . describe the famous and interesting progress of thought on the subject.

But first it gives characteristic properties, beginning with Bolyai's space.

The sum of the three angles of a triangle is always less than two right angles. The area of the triangle ABC is $\lambda^2(\pi-A-B-C)$. If the base BC of a triangle is kept fixed and the vertex A moves in the fixed plane ABC, so that the area ABC is constant, then the locus of A is a line of equal distance from BC. This locus is not a straight line.

I have called it an *equidistantial*.

The angle A [which a perpendicular to one of two parallels makes with the other] is called by N. I. Lobatchewsky the "angle of parallelism."

Here as everywhere else in the spelling of Lobachevski's name, the authors have made a very regrettable slip. Lobachevski transliterated his own name into French as Lobatcheffsky, and so it stands in the "édition de Kasan," 1886.

In 1869 Potocki transliterates the name into French as Lobatchefsky, and this spelling is used in the French prospectus issued at Kazan to found the great Lobachevski prize; and the volume "In Memoriam N. I. Lobatschevskii," bears as subtitle, Collection des mémoires présentés à la Société Physico-mathématique de Kasan pour la fête de l'inauguration du monument de Lobatchefsky (1/13 Septembre, 1896) par Mm. Hermite, Halsted, Girardville, Laisant, Lemoine, Neuberg, Ocagne.

My contribution I wrote while sojourning in Kazan, where I had abundant opportunities to learn the name. Gino Loria adopts in Italian the spelling Lobatscheffsky. Now Lobachevski himself also transliterated his name into German, and it stands on the title page of the original edition of his Geometrische Untersuchungen as Lobatschewsky. But Stäckel and Engel Germanize it as Lobatschefskij, the abomination ij being an attempt to represent the i, as in Italian, and the ĭ, very short, with which the name ends in Russian. My friend Sommerville falls into this pit, and spells the name Lobačevskij. Had he dropped that j and replaced his fifth letter by its exact equivalent, our ch as in church, he would have had the proper English transliteration, Lobachevski.

If we be willing to permit in the Encyclopædia the final y, still as English its t is superfluous and its w is indefensible, so that, as the name occurs 25 times, there are 50 places where the quicker the stereotype plates