

Half a dozen birds are described in the same way, and then the Crocodilians and serpents are discussed.

Of the fishes the dreaded piranha, the sting-ray and the electric eel are made more real to most of us, who have spent, at most, only a few months in the South American jungle, than they ever were before.

The descriptions end with certain jungle pests and insects for which the continent is noted.

A six-page bibliography and an index add to the usefulness of the book.

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REPORTS

THE NEW INTERNATIONAL COMMISSION OF SNOW AND GLACIERS

At the Seventh Assembly of the International Union of Geodesy and Geophysics, which was held in Washington last September, the International Association of Scientific Hydrology, one of the component units of the Union, effected the consolidation of two of its own commissions—the Commission of Snow and the Commission of Glaciers. The action was taken after a preliminary poll of the membership of the two commissions had shown an overwhelming majority in favor of the consolidation. Moreover, the presidents of the two commissions, Professor J. E. Church, of the University of Nevada (Snow), and Professor J. M. Wordie, of St. Johns College, Cambridge, England (Glaciers), had strongly recommended it.

Professor Church was designated acting president of the new Commission of Snow and Glaciers, to serve in that capacity until international relations will permit the holding of a formal election of officers. Like all other sections of the International Union of Geodesy and Geophysics the Association of Hydrology has deferred election of officers for the present triennial, in view of the sparse attendance of European delegates at the Washington Assembly, due to war conditions.

The new Commission of Snow and Glaciers aims to take into its purview all research relating to snow and ice in their varied forms. It might appropriately have been named Commission of Snow and Ice, but it preferred to adopt the name Commission of Snow and Glaciers in deference to the former Commission of Glaciers, which is by far the older of the two bodies that are now consolidated, and which, indeed, was in existence long before the Association of Hydrology was formed.

The original *Commission Internationale des Glaciers* had its inception in 1894, at the International Geological Congress at Zurich. It was charged, broadly, with the task of studying existing glaciers throughout the world, but actually its efforts have been concentrated on securing statistics of the secular variations—advance and recession—of glaciers in response to climatic fluctuations. Inasmuch as this task requires the making of annual measurements on large numbers of glaciers in different countries, with the aid of many co-

operating agencies, governmental, scientific and other, it has inevitably grown into a vast enterprise. The results, however, have proved of value, not only to glaciologists but also to hydrologists, hydraulic engineers (making use of runoff from glaciers for economic purposes) and climatologists.

In 1914 the work of the commission was stopped by the World War, and coordinated effort ceased for a number of years. In 1927, however, at the invitation of the International Association of Scientific Hydrology, the commission transferred its functions and its personnel to a new *Commission Glaciologique* (Commission of Glaciers) created by the association, and under these new auspices its work has been carried on ever since.

Meanwhile, at the Lisbon Assembly, in 1933, the association set up a Commission of Snow and appointed Professor Church president thereof. So rapidly did this commission grow under the enthusiastic leadership of its president that by 1936, when the association met in Edinburgh, it had become by far the largest and most active of all the commissions of the association and had expanded its field to cover all phenomena of snow and ice, with the exception of glacier-variations. Overlap with the work of the Commission of Glaciers seemed almost inevitable, and so the question naturally arose whether consolidation of the two commissions would not in the end be mutually advantageous to them. Their union was approved by the executive committee of the association at its meeting in April, 1939, at Montreux, Switzerland, and so the way was paved for its final consummation at the Washington Assembly.

Provision has been made within the new Commission of Snow and Glaciers for a permanent Committee on Glacier-Measurements, which will continue the work previously carried on by the Commission of Glaciers, securing systematic records of the annual variations of glaciers. It is Professor Church's intention to expand the scope of that work, which heretofore was restricted largely to Europe and the United States, so as to take in all the more important glacier-districts of the world, including the Andes of South America, the great mountain chains of Asia, the Alps of New Zealand and the Arctic regions.

Aside from this enterprise the commission has

planned for the triennial ending in 1942 the following formal program:

Question 1. Study of the origin, drift and dissolution of icebergs, with reference to the forecasting of their seasonal appearance.

Question 2. Physical changes in the snow-cover conducive to runoff, especially floods.

Question 3. Study of the crystalline texture of glacier-ice in relation to the mode of movement of glaciers.

In addition the following four special projects have been assigned to temporary committees:

(1) Standardization of maps of snow-cover and ice-cover for the world.

(2) Uniform classification of different types of snow and snow-cover, and uniform nomenclature for the same.

(3) A system of classification for the international bibliography of snow and ice.

(4) Standardization of methods of snow-surveying and forecasting runoff from snow.

Incidentally, it may not be out of place here to explain for the benefit of those who may wonder why the International Association of Scientific Hydrology insists on keeping the adjective "scientific" in its title, that many of the European members consider it desirable to keep it in order to emphasize the fact that the association is concerned solely with research in hydrologic science, excluding the practical application thereof in the domain of hydraulic engineering.

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SPECIAL ARTICLES

MOBILIZATION OF VITAMIN A FROM ITS STORES IN THE TISSUES BY ETHYL ALCOHOL

ONE of the problems under investigation in this laboratory is the mobilization of vitamin A from its stores in the body. Previous to the experiments with ethyl alcohol reported here, the effects of various drugs and experimental procedures, including the action of adrenalin, histamine, insulin, mecholyl chloride, chloroform, exsanguination, ether inhalations and operative trauma, were tried. Repeated bleeding of rabbits gave some evidence of vitamin A mobilization for, although considerable amounts of blood were withdrawn, the total quantity of vitamin A in the circulating blood

remained constant. Prolonged ether anesthesia at times produced a slight rise in the serum vitamin A but this was not a constant finding. However, no agent, in our hands, has yet produced an effect comparable to that of ethyl alcohol. In these experiments the vitamin A content of the serum was determined according to the technic of Evelyn, using the Evelyn Photoelectric Colorimeter.

Two normal dogs were given 60 ml of ethyl alcohol in a 20 per cent. aqueous solution by stomach tube. The dogs had not eaten for twenty-four hours. The vitamin A content of the serum of both dogs showed a prompt increase, with maxima occurring at seven and twenty-four hours respectively after the adminis-

TABLE I
THE VITAMIN A CONTENT OF SERUM IN NORMAL DOGS FOLLOWING THE ADMINISTRATION OF ETHYL ALCOHOL

No. of dog	Ethyl alcohol Ml	Wt. of dog Kg	Time of fasting Hrs.	Evelyn photoelectric units of vitamin A per 100 Ml of serum						
				time after the administration of ethyl alcohol						
				Fasting	1½ hrs.	3 hrs.	6 hrs.	9 hrs.	24 hrs.	48 hrs.
1	60 By stomach tube	18	24	222	309	440	763	...	638	...
2	60 By stomach tube (Dog vomited)	24	24	263	358	389	385	412	440	362
3*	60 By stomach tube	17	48	89	120	142	...	154	192	150
4†	60 By stomach tube	18	48	203	319	389	453	498	669	849
5	60 By stomach tube	17	48	483	630	699	...	728	621	538
6	60 By stomach tube	17	48	569	1,323	...	805	914	659	...
7	30 By stomach tube	16	48	43	77	103	...	125	127	129
8	15 By stomach tube	18	48	320	424	459	...	471	385	...
9	17.5 Intravenously	21	20	424	518	571	662	600	742	488
10‡	16 By portal vein	17	44	150	249	292

* Liver contained 1,926 Evelyn Photoelectric Units of vitamin A per 100 grams of tissue.

† Liver contained 50,463 " " " " " " " " " " " "

‡ Liver contained 2,747 " " " " " " " " " " " "