GEOGRAPHY

Historic Maps of Interior China Now Gift to Library

Surveying Documents Outlining Topography Of 2,800 Square Miles Were First Ever Made There By Whites

WHITE men's first maps of interior China, made under military guard years ago while the smoke of the Boxer Rebellion still hung in the oriental sky, have just been turned over to the Library of Congress by R. H. Sargent, veteran topographic engineer of the U. S. Geological Survey.

For thirty-two years Mr. Sargent has treasured these maps while he journeyed all over the Americas surveying and mapping. Now, as he leaves Washington for his 27th trip to Alaska, his original plane table maps of China go to the national library for safe keeping.

Stocky, with tanned cheeks and a thatch of snow-white hair, Mr. Sargent's eyes twinkled as he went over the maps he has treasured so long.

"Bailey Willis, Eliot Blackwelder and I got into China just after the Boxer uprising had been quelled," Mr. Sargent said. "The Carnegie Institution asked us to make a geological and topographic study of the mountain country west of Peiping near the Great Wall."

Bailey Willis is the nationally known geologist now emeritus professor of that science at Stanford University. Dr. Blackwelder is the present professor of geology in the same school.

The expedition entered China in propitious circumstances. Official China, at least, was very, very well behaved just after the Boxer episode. From Tientsin to Peiping travel was by train. And then a hundred miles westward the three Americans came to the railhead.

Military Protection

Out came instruments and the party went to work. And work they did, fast and furiously, under protection of a military escort to keep off Chinese bands who still didn't know the Boxer affair was over.

The first bench mark, Mr. Sargent recalled after a look at his time-worn maps, was at 42 feet above sea level. That was on January 2, 1903. Fifty-eight days and 200 miles later their survey showed an altitude of 10,000 feet. In only 21 working days they had obtained observations on enough peaks, crests, ridges and valleys to map, for the first time accurately, some 2,800 square miles of territory! Perhaps that's not much as judged by present-day aerial mapping, but in 1903 walking was the mode of transportation in China.

What Willis, Blackwelder and Sargent accomplished in three weeks' working time is comparable to the normal mapping progress of decades of time and generations of men in better known countries.

Finally at 10,000 feet they reached Wu-tai-shan, then the largest Buddhist center in northeastern China. Its 28 statues to Buddha stared mystically down on them.

Slept in Temples

"We slept in temples that night," Mr. Sargent recalled.

"Didn't you have trouble with the natives, Mr. Sargent?"

"No. we didn't. The word passed ahead of us from town to town that white men were coming. At Wu-tai-shan only seven white men had visited there before. At the more remote places we were the first.

"Because news of our coming preceded us, what corresponds to the town's mayor greeted us at each place. If we didn't sleep in his house the town's temple was at our disposal. And while we slept a runner raced ahead to prepare for our arrival at the town where we would stop the next night, some ten or twenty miles away. The Chinese, you know, don't live in scattered houses. They like their towns.

"At each settlement I would seek out the oldest, and supposedly the wisest graybeard and have him tell me the name of the place. I would write it down phonetically, as it sounded to me, and have him write down the Chinese characters for it. When we came back to America Chinese students in our universities took my spelling, and the Chinese characters, and figured out where we stopped.

"From the mountain country we took a cross country jump some 225 miles. As far as the Hwang Ho (Yellow River) we traveled in the Chinese two-wheeled carts. My principal recollection of that stage of the journey was the absence of springs in the carts.

"Then, crossing the Hwang Ho we kept on to the Hwan River farther west. On this stretch the trails were so narrow that even the burros had difficulty.

"Finally reaching the Hwan we floated down stream for a hundred miles on boats, taking time traverse measurements of the distance covered.

"That stage of the journey was comparatively easy but we had yet to reach the Yangtze River, another hundred miles to the south. The only way to get there was on foot. And we walked all the way taking stadia traverse measurements en route.

"How do you take stadia measurements? Well your surveying telescope has two spiderweb threads inside it spaced closely together. As you look through the instrument the tiny space between them will cover larger and larger objects as you move away. At one hundred yards a small tree may just be enclosed in the field of view. At two miles the whole side of a house may cover the same angle.

"To take stadia measurements your aide goes ahead with his surveying rod and holds it up while you see how much of it is enclosed between the cross hairs inside the instrument. Then by similar triangles you can calculate how far away the rod is. Finally you pick up your surveying telescope, move ahead of the rod and sight back at it. Thus the party works its way across country as we did.

"The rest of the trip? Well, there's not much left to tell. We hit the Yangtze river at the head of steamer navigation some 1,100 miles inland from Shanghai and caught the next boat."

The geological and topographical results of the expedition have been published in two volumes by the Carnegie Institution of Washington under the title "Research in China." Much of the material is still the best known on the region today.

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MEDICINE

Egyptian Drug Addicts Now In Grip of Tea Addiction

DRUG addicts in Egypt have turned to tea. They are spending almost all their wages on tea and cannot work without it. Their health and physique are breaking, and a village headman reports that where formerly four men hoed an acre it now takes eight.