

GEOGRAPHY

Explorer Finds New River In Jungle of Brazil

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IN CAMP on the Rio Brown, we are preparing to follow its course, with the expectation of reaching ere long the territory of the Kulu Indians. The Rio Brown does not appear on any of the maps and atlases heretofore published and has apparently not been seen by white men prior to our coming.

As the discoverer of this river, I have taken the liberty of giving to it the name of "Rio Brown," in honor of Dr. William Moseley Brown, of Ballston, Va., under whose auspices, along with several others, the expedition is being conducted. I have already notified the Brazilian government of this action, which will undoubtedly be promptly approved.

From the Rio Brown our journey now takes us into the territory of the Kulu Indians. This is the locality where Colonel Fawcett was last heard from and where more than one attempt has been made to discover his fate. Further reports will be made on our trip into this territory and our explorations along the Rio Brown. From Pirapora, Estado de Minas, Brazil, which is the last railroad station and the "jumping off" place into the jungle, the journey was by canoes along the following rivers: Rio San Francisco, Rio Carinhanha, Rio Paran, Rio Tocantin, Rio Gurupi, Rio Araguaya and Rio Brown.

The route traversed has been somewhat different from that which we intended. In order to press forward as rapidly as possible, we depended chiefly upon the waterways. We refrained from traveling by Para (Belem), going direct from the Rio Tocantin into the Indian territory of the Gurupi River, and thus saving much time.

Indians Killed Two

The trip up to this point has been at times beset with greatest difficulties. Powerful rapids and waterfalls impeded our progress tremendously. The hostile Indians, too, caused us much distress. Two of my traveling companions (natives) were killed through enemy bowshots.

Many wild animals, snakes, and beasts of prey crossed our path. I personally shot as many as seven jaguars, all of large size and black in color.

The trip from the Rio Tocantin to the Gurupi River was full of hardships. On the Tocantin River we were compelled to leave our canoes behind. Our outboard motor, cans of gasoline, and baggage were dispatched in forced marches to the Gurupi by native carriers. On the Gurupi we built a raft and made our way into the territory of the Urubu Indians.

Our return journey from the Rio Gurupi to the Araguaya River was just as difficult. The Indians living in this territory gave us canoes fashioned from logs, which had been hollowed out with fire, so that we could press on without delay.

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miss the earth had been predicted. What then are our present chances? In 1928 many Leonids appeared; in 1929 very few; in 1930 the numbers increased greatly; in 1931 we had a very fine display. Meantime calculations made by expert English and Russian astronomers show that the stream of particles should have been shifted back since 1899 into such a position that the earth will pass through it again, probably as well as in 1866, though not right through the densest part which we met in 1833. It

is on the basis of this information that astronomers feel hopeful that we shall see a shower of considerable brilliance.

What should you expect to see if you watch for the Leonids? A description of last year's shower should give you some indication of what we hope this year's will be. On the night of November 17, 1931, a party of eleven of us was at a country home high up in the Catskill mountains. The sky cleared beautifully about 11 o'clock, just as Leo was rising. Immediately meteors began to shoot across the sky, almost the first being a brilliant red Leonid. A total of 2,600 was counted before dawn by our group; making allowance for duplicates, at least 1,000 different meteors were seen. A very large number of these were bright, and dozens left fine trains, some of which remained visible from one to twelve minutes. Such trains, when they lasted for some minutes, changed their forms and drifted with the winds of our upper atmosphere, adding greatly to the beauty of the spectacle. The bright meteors were of various colors, and sometimes as many as four came one after the other so quickly that the observer could not make a record of the first without missing all the others. Last year there was no moonlight to interfere.

We hope, as I said, for a far better display in 1932, probably on the night of November 15-16; but the main shower may occur on the preceding or following night. Also we may have the bad luck of having the richest part come during our daylight hours, which would make it visible to either Europe, the Pacific, or Asia. These contingencies, like cloudy weather, cannot be helped. Unfortunately also, the moon will be bright this year, and its light will cut down the number of the fainter meteors seen.

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