



U. S. Geological Survey

Start of Powell's Second Colorado River Expedition, Green River Station, Wyoming, May 22, 1871

Powell's previous journey, in 1869, dispelled the worst terrors with which popular imagination had invested the unknown river, proving that it did not flow through subterranean channels nor plunge over cataracts greater than Niagara. The second expedition, undertaken with the aid of a Congressional appropriation, was a more ambitious affair, which developed into a comprehensive survey of the geography, geology, ethnography, and natural history of the region. The "Powell Survey" was one of four Government organizations that were eventually combined to form the United States Geological Survey, of which Powell became Director in 1881.

The River of Adventure

By CHARLES FITZHUGH TALMAN

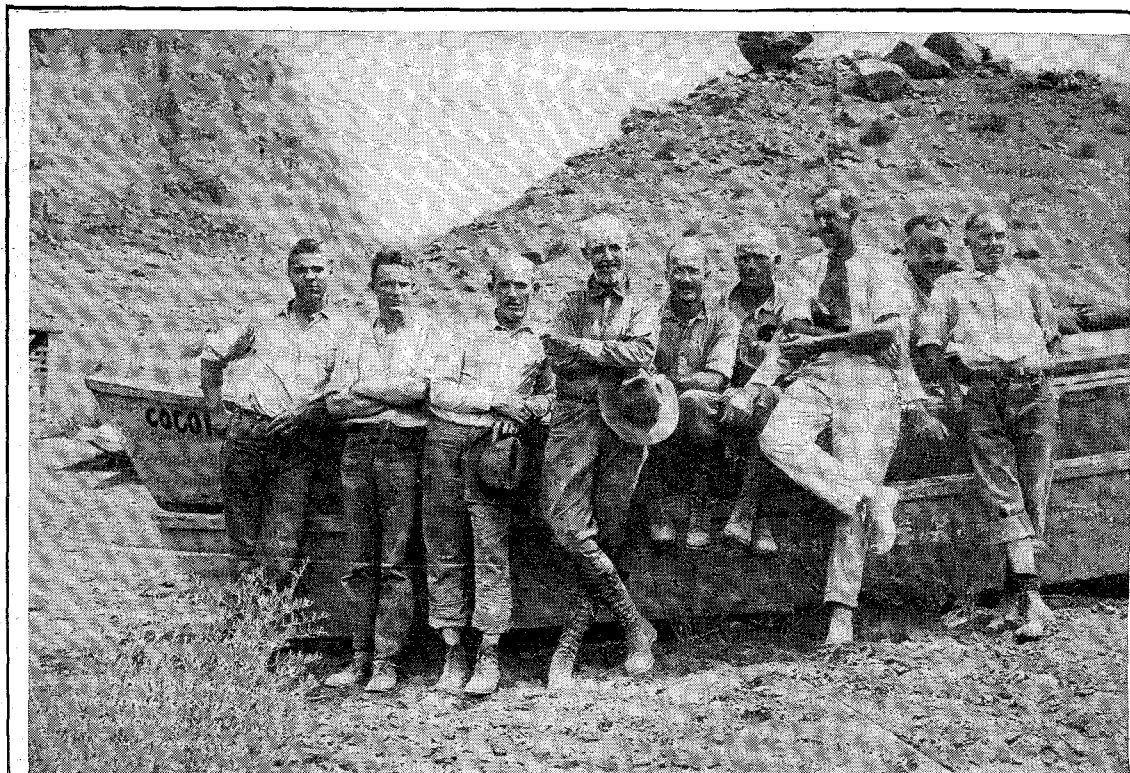
WHETHER the Grand Canyon of the Colorado or the Himalayan vista unfolded at Darjiling is the most stupendous of earthly spectacles is a question concerning which travelers differ. Likewise there is no arbiter to decide whether the Mount Everest Expedition, which failed in 1922, or the Colorado River Expedition, which succeeded in 1923, was the most soul-stirring event in the recent history of geographical exploration. As a feat of valor both were eclipsed by Powell's historic journey down the Colorado in 1869. Now that the world is sounding the praises of Birdseye and his gallant comrades, who completed the mapping of the river last summer, it is worth while to turn back to the earlier adventure, which ought to be—but is not—known to every schoolboy in the land.

Major J. W. Powell left his right arm on the battlefield of Shiloh before he took to exploring. Despite this disadvantage, he set a new pace in his chosen field. When Powell and his companions, in four small boats, began their thousand-mile journey down the canyons, the "Colorado River of the West" was a name that spelled mystery and terror. The one positively known fact about the river was its descent of thousands of feet in the vertical, through narrow, mile-deep gorges, implying at best a succession of

dangerous rapids, with the chances at least a thousand to one that there were cataracts, perhaps rivaling Niagara. Powell made more than a hundred portages; but there were plenty of places where the sheer walls of the chasms afforded no opportunity to leave the boats. Shooting rapids in such places, with the chances all in favor of going over the brink of a Niagara at the next turn in the stream, was an experience that these intrepid heroes faced day by day. Three men could not endure the test, abandoned the party midway, and were forthwith slaughtered by the Indians.

About half a dozen parties have accomplished this thrilling journey since Powell blazed the trail. Powell himself repeated his exploit in part in the early seventies; this time making a more thorough examination of the adjacent country, under Government auspices. How many adventurers have started down the river, only to be turned back by the fury of the waters, or have pushed on to their destruction, nobody can say, but the failures far outnumber the successes.

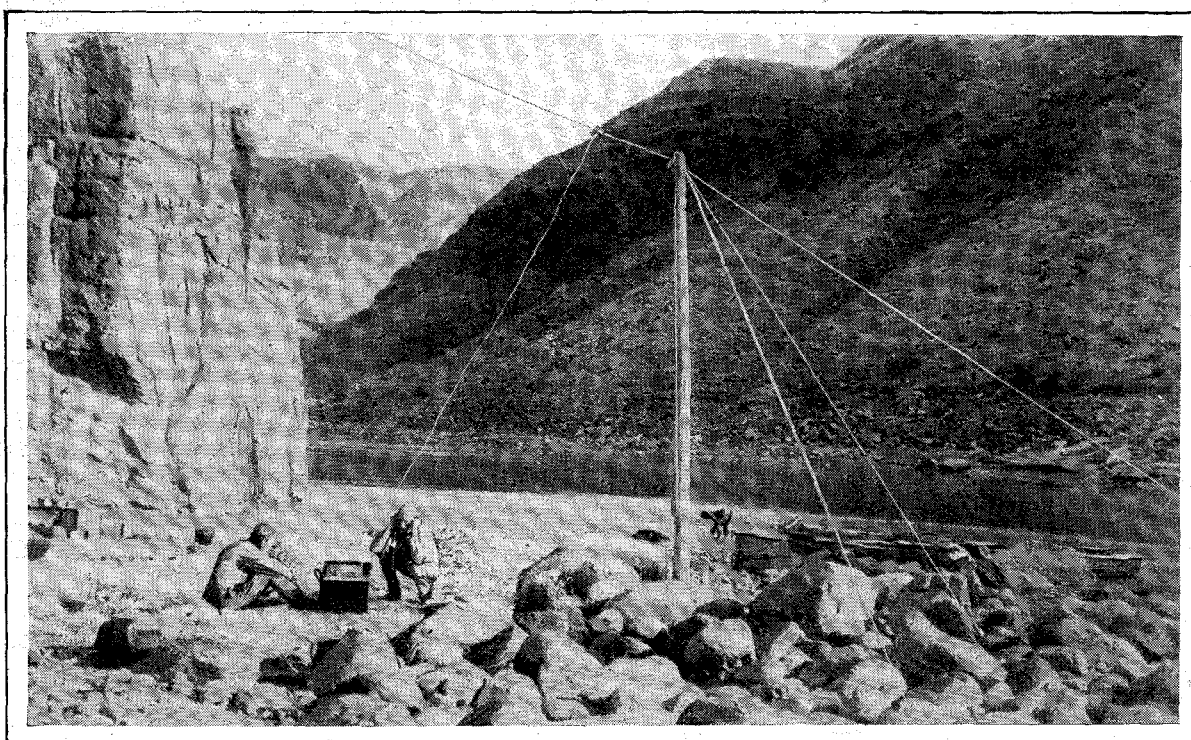
The expedition of last summer, led by Colonel C. H. Birdseye, of the United States Geological Survey, started from Lee's Ferry, Arizona, on August 1, and reached Needles, California, 450 miles downstream, on October 19. The journey was a succession of man-killing portages and



U. S. Geological Survey. Photograph by Lewis R. Freeman

The Men who Braved the Rapids of the Colorado in 1923

From left to right : Leigh Lint and H. E. Blake, Jr. ; Frank Word ; Colonel C. H. Birdseye, leader of the party ; R. C. Moore ; R. W. Burchard ; E. C. La Rue ; Lewis R. Freeman ; Emery Kolb



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Radio Installation of the Birdseye Party

No up-to-date exploring expedition is completely equipped without a radio receiving outfit. In spite of prophecies that a radio set could get nothing in the depths of the canyons, that carried by the Birdseye expedition worked satisfactorily wherever it was set up. Concerts, baseball scores, and the news of the world relieved the hardships of the journey. The party heard of President Harding's death within three-quarters of an hour after it occurred