

face; and into this, our Indians reported, empties a large river. Rounding Point Perthes (after Justus Perthes of Gotha), nearly white with its covering of limestones, some of them almost true marble in their brilliancy, we enter Tahko Lake, eighteen miles in length by our measurement (forty-five, according to one guess on record). A well-deserved remark regarding conjectural geography in order to 'fill out' maps, charts, or books, I hope will not be found amiss at this point. In one of these we were given to understand that from here the Indians make Fort Selkirk in a day and a half in their birchbark canoes. There are no birchbark canoes used on the lakes, nor as far as Selkirk. The very few Indians living on the four hundred and thirty-three miles between Tahko and Selkirk never stay in their cramped wooden canoes over six hours during a day, and would therefore have to paddle over each mile at the rate of one minute and thirty-five seconds.

Tahko Lake receives a small stream on the south, which, followed up, leads to one of the mountain passes that debouch upon the waters of the Pacific, so said our Indians. The same authorities gave us to understand that it drains smaller lakes, and has a smaller bed than the rivers and lakes through which we had passed; and its appearance, as we sailed by, seemed to confirm their opinions, thus showing that we had been on the main stream, or the Yukon proper.

(To be continued.)

FLOODS IN THE OHIO.

No river of the same magnitude fluctuates in depth so much as the Ohio. Twice, or oftener, during most years, the river rises at Cincinnati to a stage of forty-five feet six inches by the gauge at the water-works, when the occupants are compelled to vacate the premises at the foot of Commercial Row. A greater depth than this is a flood, and occasions more or less loss and suffering. Extreme low water is two feet, and extreme high water of February, 1883, was sixty-six feet four inches, — a difference of sixty-four feet four inches.

The gauge at the water-works was fixed in 1858, and all observations since then are referred to that standard. This gauge is intended to show the depth of water on two principal bars near Cincinnati, — Four-Mile bar above, and Rising-Sun bar below, the city. All observations of the stage of water of which we shall speak have been reduced to this gauge.

We may mention the noted floods preceding the establishment of the gauge in 1858.

1774. — It is traditional that at about this year there was a great flood in the Ohio. Vol. i. p. 343, of the *American pioneer*, states that two white hunters were detained some time in March of this year at the mouth of the Big Kanawha by a remarkably high freshet, which, from fixed marks on Wheeling Creek, is supposed to have been equal to that of 1832.

1789. — Various records show that there was a remarkable flood this year observed by the first white settlers, which must have been of much longer duration than any of later date.

1792. — It is within the recollection of some now living, that four years after the settlement of Losantiville (Cincinnati) there was a flood that covered the land on which Columbia now stands. The stage of water must have been sixty feet or more.

1815. — Another great flood occurred this year, but it was of less magnitude than that of 1792.

1832. — There are several points in Cincinnati where permanent high-water marks were made on Feb. 18, 1832; and they almost exactly agree in showing that the stage of water was then sixty-four feet three inches. The population of Cincinnati was then twenty-eight thousand; and, as the city was situated upon the river-bank, nearly the whole of it was inundated by a flood, which increased continually for ten days.

1847. — Cincinnati contained about ninety-six thousand people at this date. The river began to rise on Dec. 10, and on the 17th reached sixty-three feet seven inches.

The following table records the highest stage of water at Cincinnati each year since 1858, as well as those just given for 1832 and 1847: —

Year.	Date.	Feet.	Inch.	Year.	Date.	Feet.	Inch.
1832	Feb. 18,	64	3	1871	May 13,	40	6
1847	Dec. 17,	63	7	1872	April 13,	41	9
1858	June 16,	43	10	1873	Dec. 18,	44	5
1859	Feb. 22,	55	5	1874	Jan. 11,	47	11
1860	April 16,	49	2	1875	Aug. 6,	55	5
1861	April 19,	49	5	1876	Jan. 29,	51	9
1862	Jan. 24,	57	4	1877	Jan. 20,	53	9
1863	March 12,	42	9	1878	Dec. 15,	41	5
1864	Dec. 23,	45	1	1879	Dec. 27,	42	9
1865	March 7,	56	3	1880	Feb. 17,	53	2
1866	Sept. 26,	42	6	1881	Feb. 16,	50	7
1867	March 14,	55	8	1882	Feb. 21,	58	7
1868	March 30,	48	3	1883	Feb. 15,	66	4
1869	April 2,	48	9	1884	Feb. 14,	71	3
1870	Jan. 19,	55	3				

The flood-stage of 1875 was remarkable as occurring in summer, when the river is in most years low.

The great flood of 1883 was of unprecedented magnitude, and so great a rise was entirely unexpected. The stage of water had not exceeded sixty feet for thirty-seven years. By it the whole of those parts of Cincinnati and the towns on the opposite side of the river—Covington, Newport, and Dayton, Ky.—located nearest the water were inundated. In Covington, in all, perhaps 350 houses were submerged. In Newport not less than 2,100 houses were flooded. In Dayton and Bellview, Ky., over 400 houses were under water.

In Cincinnati, travel on many of the street-car lines was suspended; nearly all the freight and passenger depots were submerged; all but two of the railroads stopped running; fifteen of the largest coal-yards were under water; and the gas-works suspended, leaving the city in darkness. More than 1,500 business-houses, and nearly 3,700 dwelling-houses, were inundated, causing more than 2,400 people in Cincinnati alone to become objects of charity, for whom shelter, covering, clothing, and food must be provided.

It is within bounds to say that one-tenth of the population in and around Cincinnati needed assistance of this kind. The Associated charities superintended the distribution of aid to those suffering. From Feb. 12 to March 5 this organization relieved 5,260 families, or 24,111 persons. It issued 105,141 rations, and supplied 2,046 families with clothing, 1,916 families with bedding, and 647 families with coal. It also distributed 3,991 pairs of boots and shoes.

The pecuniary losses that resulted from this flood can never be precisely known, but it has been estimated that along the two thousand miles of shores inundated it aggregated sixty millions of dollars.

The town suffering most in proportion to its size was Lawrenceburg, Ind., which was completely inundated. It is so situated that at this stage of water the Miami River runs directly through the town, pushing houses from their foundations, and sweeping away every thing movable.

The flood was due to two storms, — the first from Feb. 3 to 6, in which about 3.5 inches of rain fell at Cincinnati; and the second on Feb. 10 and 11, in which the rainfall was about 2 inches. These storms extended to the head waters of the Ohio, and fell upon frozen ground; so that the water could not soak into the earth, but was carried at once into the water-courses.

The flood of 1884 arose from a single storm on Feb. 4 to 6, in which the precipitation was

unusual in amount and rapidity; being as much as 4.46 inches in eight hours less than three days. This storm, combined with the warm weather, caused a general thaw over all the region from which the feeders of the Ohio come, and sent large volumes of water into the rivers, besides the immediate rainfall.

When we consider what an unusual combination of circumstances is necessary to cause a stage of water exceeding sixty feet, and that such an occurrence cannot be ordinarily expected more than about once in a quarter of a century, it appears most remarkable that two such floods should happen in successive years.

A WOMAN'S JOURNEY TO THE KARAKORUM VALLEY.

MADAME UJFALVY, who recently accompanied her husband to Kashmir and Baltistan, has published an interesting and lively account of the glacial region of the Himalayas, which she was the first European woman to penetrate. In the village of Shamba, in the Kulu country, on the occasion of a ceremonial visit to the temple by the rajah, it is customary for the priests to sacrifice a she-goat. Once undertaken, the priests may not eat until the sacrifice is complete; and the assent of the animal to its own death, without which it may not be killed, is supposed to be indicated by a trembling of the body. The unconscious creature is not always in a trembling mood; and to induce the same the priests squirt cold water into its ear, which usually has the desired effect. On one occasion, the authoress relates that even this failed, and the goat, outraged by such treatment, escaped to the rugged mountain side, and, even after recapture, refused to gratify its captors. Put to their wits, the priests finally plunged it bodily into the icy mountain stream which dashes through the village. Taken out again, it naturally trembled with its whole body; and the sacrifice was finally completed to the satisfaction of all, especially of the priests, who had already imagined themselves perishing of famine.

Srinagar, capital of Kashmir, sometimes known as the oriental Venice, seemed less attractive than report had made it. The streets were narrow canals of stagnant and offensive water, in which swarms of ragged people disported themselves. Dirt was too evident to be ignored. Only when evening set in, and all contrast disappeared under the moonlight, did this singular and sombre town seem to harmonize with the magnificent mountains which surround it. There are some hundred thousand inhabitants; and, besides the finest quality of shawls, they produce the finest and most artistic work in silver and copper. The passage to Baltistan from Srinagar traverses a singular plateau fourteen thousand feet above the sea. The earth is bare, and undulated as if in waves. It is the bed of an extinct glacier, and surrounded by mountains, between which the wind rages, rendering it passable only in the three summer months. Even in