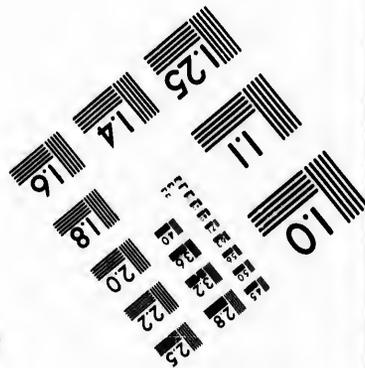
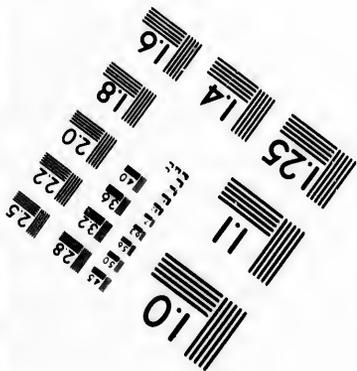
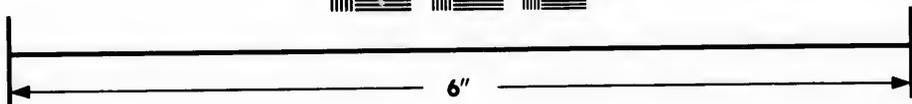
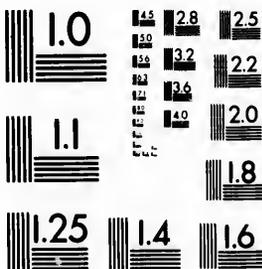


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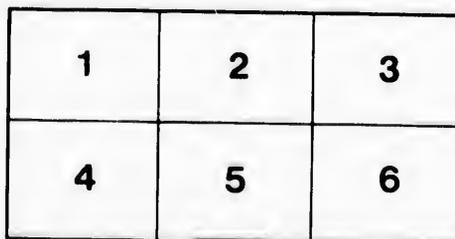
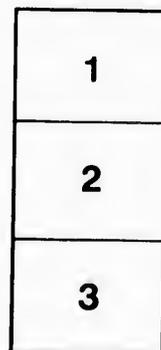
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MARCH 23, 1897

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

THE ITINERARY OF JOHN JEFFREY, AN EARLY
BOTANICAL EXPLORER OF WESTERN
NORTH AMERICA.

BY FREDERICK V. COVILLE.

Among the botanical explorers who have done important work in North America, John Jeffrey is one of the most obscure. It has been known that he was a Scotchman, that about the year 1850 he was sent to our northwest coast by patrons of botanical science in Edinburgh, and that he made important collections; but it is not known* in what town or in what year he was born nor in what country or in what year he died. One very rare pamphlet, issued in the year 1853, which contains descriptions of *Pinus jeffreyi* and a few other new species, and has been seen by few American botanists, indicates that he had visited the coastal region of Oregon and the mountains of northern California. It has not been known that ten other pamphlets or circulars regarding his work are in existence, and that Jeffrey traveled from Hudson Bay to the Rocky Mountains of British America and the shores of the Pacific Ocean, and from the mouth of the Gila River, in Arizona, to the Fraser River, in British Columbia.

Through the kindness of Professor Isaac B. Balfour, of Edinburgh, and Professor C. S. Sargent, of the Arnold Arboretum, a mass of documents, both manuscript and printed, relative to Jeffrey and his work has been placed in my hands for examination, a courtesy which I have to acknowledge with grateful appreciation. From these papers the following sketch has been chiefly drawn:

*According to Britten and Boulger, Biographical Index of British and Irish Botanists, 1893, p. 93.

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On the 22d of November, 1849, was held at the Botanical Gardens in Edinburgh a meeting of "gentlemen interested in the promotion of the arboriculture and horticulture of Scotland." This meeting resulted in a decision to send to western North America a botanist, who should collect the seeds of trees, shrubs, and other plants suitable for horticultural purposes, in the region traversed by David Douglas, "to complete his researches, and to extend them into those parts of the country not fully explored by him." It was decided to raise the necessary funds through subscribers, who should share in the specimens received from the collector.

The subscribers formed themselves into an organization, under the chairmanship of Professor J. H. Balfour, designated in their official proceedings as the "Oregon Botanical Association." The work of their collector was called usually the "Botanical Expedition to Oregon," sometimes the "Oregon Botanical Expedition." Eleven quarto circulars of one to four pages each (in one case with five lithograph plates), issued to the members of the association by Andrew Murray, its secretary, have been examined by the writer—doubtless a complete set—and from the miscellaneous dates, numbers, and localities given in them the itinerary of the collector has been compiled.

November 20, 1850, Mr. Murray reported, on behalf of an executive committee, that the services of Mr. John Jeffrey had been secured, and that with authentic credentials and the hearty coöperation of the Hudson's Bay Company he had sailed from London early in June, 1850, for Hudson Bay.

On April 7, 1851, Jeffrey wrote Professor Balfour from Jasper House, in the British Rocky Mountains, on the headwaters of the Athabasca River, stating that he had left York Factory, on Hudson Bay, August 20, 1850, and reached Cumberland House, on the Saskatchewan River, October 8, where he remained till the early part of January, 1851. He had then proceeded up the Saskatchewan to Edmonton House, overland to the Athabasca, and up that river to Jasper House, where he arrived March 21. A small and unimportant collection from the eastern side of the Rockies was shipped about this time and reached Edinburgh late in the year.

From Jasper House Jeffrey crossed the Rocky Mountains at Athabasca Pass, between Mount Brown and Mount Hooker, and coming to the Columbia River at the point where it bends ab-

ruptly around the northern end of the Selkirk Mountains, descended it to Fort Colville, on the Columbia a few miles above the mouth of Colville River, in the present state of Washington. He arrived at this place about May 13, 1851.

On July 9 Jeffrey was at the junction of the Okanogan and Similkameen (spelled by him Semekemele) rivers, in Washington, just south of the present British boundary, having reached that point doubtless by descending the Columbia river from Fort Colville to the mouth of the Okanogan and following the latter to its forks. He then ascended the Similkameen and its branch, the Tulameen, stopping at Campment des Femmes, near the mouth of Otter River, a northern tributary of the Tulameen, and proceeded across the country westward to Fraser River. He appears to have descended immediately to Vancouver Island, for the circulars mention certain plants collected there in July, 1851, and then to have returned to the Fraser. He went up this river at least as far as $50^{\circ} 23'$ north latitude, collecting from August 11 to September 27 to an altitude of 6,000 and even 8,000 feet in the mountains east of the river. He made collections also in the autumn on Mount Baker, in extreme north-western Washington, one entry being as late as October 2.

The winter of 1851-52 and the following spring, until at least April 24, Jeffrey spent on Vancouver Island, probably at Victoria. In May, 1852, he was at Fort Nisqually, Washington, at the head of Puget Sound, and in the same month he went on southward to Fort Vancouver (site of the present town of Vancouver, Washington), on the Columbia River. Remaining here for about two months, he next engaged in an expedition, from about August 1 to November 1, to the valleys of Umpqua, Klamath, Trinity, and Rogue rivers, Siskiyou Mountains, Cascade Mountains, and Mount Shasta, all in southern Oregon and northern California. On December 4, 1852, he was on Mount Jefferson, in the Cascade Mountains of Oregon, about latitude 44° .

Jeffrey passed the winter of 1852-53, like the preceding one, on the lower Columbia. In the following season, 1853, he repeated in part his work of the preceding year, collecting in the Umpqua Valley and the Siskiyou Mountains on Clear Creek, Mount Shasta, Applegate River, Scott Mountain, and the Coast Range, on the Sierra Nevada in latitude 38° , in the Sacramento Valley, and the American Fork of the Sacramento, and at San Francisco Bay.

The plants of this season's collecting, 1853, from the localities mentioned above, were the last that Jeffrey sent to Edinburgh, and his employment by the association practically ceased at this time, his original contract being for three years' service. The following extract from a letter received by Andrew Murray in Edinburgh from his brother, W. Murray, who was living at San Francisco, gives a hint of Jeffrey's probable movements :

"SAN FRANCISCO, 19 May, 1854.

"I yesterday received your letter enclosing one for Jeffrey. * * *

"I went again to McKinlay, Garrioch & Co., and they have deciphered his address to be Fort Yuma, on the Gila River (just where it joins the Colorado), where he says he will probably be until the 1st of August, and directs his letters to be forwarded by Adams & Co.'s Express to the care of their agent at San Diego, Mr. F. Ames.

"I accordingly put his letter in an envelope addressed in conformity with these instructions and took it to Adams & Co.'s Express. * * *

"They, McKinlay, Garrioch & Co., say he is a hard working, enthusiastic, very steady, and temperate man, and that just before starting for San Diego he was some three weeks arranging the proceeds of his excursions, and they doubt not that he despatched them. He had been for some weeks sick before that, which accounts for part of the long stay in San Francisco. * * *

"I met the consul just now and he said he had received another letter for Jeffrey. I forwarded it along with yours. The consul says that he (Jeffrey) never called at the consulate; that there had been quite a budget of letters and other things there for him, which have since been forwarded to him by McKinlay, Garrioch & Co. at the same time as your previous letter. * * *

"You will possibly think that I ought to have been able to find out Jeffrey while he was here, but at that time I neither knew that McKinlay, Garrioch & Co. were acquainted with him, nor that Allan, Lowe & Co. were connected with the Hudson's Bay Co."

Mr. John Ballender, who knew Jeffrey at Fort Vancouver in 1852 and 1853, writing to Andrew Murray under date of February 1, 1854, gives a brief outline of Jeffrey's movements in those years, and says :

"If this can be in any way of service to you I shall be most happy, as I feel very anxious respecting the fate of poor Jeffrey, knowing well that if he followed up the route hinted to me he had some dangers of no very trifling nature to contend with."

No further information about Jeffrey appears to have reached Edinburgh, but to those who know the terrible chances taken by a man attempting a trip to Yuma in the fifties, alone, there is little doubt that he perished of thirst upon the Colorado Desert.

