Recd March 20th
Ans March 23

Denver C.T. Mar. 10. 1863

Dear Geo Engelmann
St Louis Mo.

Dr Sir

Your favor of Feby is recd. I send you herewith a copy of all my notes of observations taken during the month of Jany 1863 — My only detached thermometer is a very common one. I have compared it with the standard Attached Ther. by detaching the bulb from the Barometer & find it to agree as you might suppose varying from 1/2 to 1 degree. I will not only be obliged to you if you will send me by mail an open air Thermometer which I can rely upon ~~but will~~, but will send you all Expense of buying & sending. Please procure one of sufficient diameter of tube to admit of the mercury's readily settling to the bulb end —

Very truly yours
F. Melcase

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Missouri Botanical Garden

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GEORGE ENGELMANN PAPERS

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Recd April 17th

Denver C.T. Apr 7, 1863

Doct G. Engelmann
St Louis Mo.

Dear Sir

Your letter of March 23d is recd. I am much obliged for the valuable information you give. In regard to health I think I never have lived in so healthy a climate. and this is true in the settlements in the highest altitudes

Mr. D. G. Collins I know. he has quite a taste for Natural Science & what facts he gives you may rely on. His address is Mountain City (P.O. the town is called Central City) C.T.

I dont know that I can explain why the ~~Open air~~ attached Ther-mometer is lower than the open air Ther. The Barometer is in a box say 4"x4"x40" with glass fastened to the wall of my house in a piazza that is always shaded. The open air Ther. is in the same box. The wall of the house is warm and adjacent to a bed room in which there is no fire

Fruit trees have not been cultivated here yet sufficiently to know at what altitude they will flourish. A few crops of cereals have been grown near Golden City. at an Elev-

tion say of 6000. ft —

I am obliged for your favorable mention of my name to the St Louis Academy of Science. and if I remain here shall be glad to contribute any facts coming within my knowledge to their fund of Science. You know ere this that I am removed not for cause I am happy to state but at the request of a political enemy S. W. Ashley of Ohio. — Dr. Parry has sent me an open air ther. which I recd a few days ago in good order

I have the use you mention "Smithsonian Tables" left with me by Lieut. Berthoud of Col. 2nd Regt.

I have not as yet ~~made~~ taken hourly observations to determine the daily Barometric Curve.

I give below the observations 28th 29th & 30th Mch. for your consideration

Sat. 28.	7 am	24.900.	at Bar. 32.5	de Th. 34°	Clear
	7 PM	24.964	56.	63	do
	11 "	24.964	45	48	Cloudy
Sun. 29	8 am	25.070	41	44	Clear
	1 PM	25.092	60	65	Cloudy. light sprinkle of rain at 5 PM

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Nov 30th	7 am	25.224	35.	38	Clear
	1 P M	25.286	56. High Wind from N.	60.	Snow Storm in the Mountains
	10 "	25.274	46.	48.	Cloudy

At the time of the high wind the Bar. stood higher than before since I have been observing & for 2 days preceding you will notice it was far above the mean —

Our high winds here are from the west. I think the heated air of the plains rising more rapidly than the cold air comes down from the mountains may account for some of the changes & the two currents meeting may show an extreme pressure on the Barometer that the weather does not show —

The wind comes down the gulches in a perfect hurricane sometimes. Golden City at the mouth of the Cañon of Clear Creek had over 20 of its buildings blown down by such a wind storm in Nov. 1861. I was out in the same wind storm — Colorado City similarly situated on the Fontaine qui bouille Cr. was partly blown down the year before —

Our rain & snow nearly all comes from the Plains — The prevailing winds are from the West & Northwest but the ~~Extreme high~~ great altitude of the Snowy Range intercepts

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and precipitates nearly all the moisture with which the moving air is freighted before it reaches us

I am very truly Yours

F. McLeese

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