33d Congress, 1st Session. [SENATE.]

Mis. Doc. No. 67.

#### LETTER

OF

## J. C. FREMONT

# TO

### THE EDITORS OF THE NATIONAL INTELLIGENCER,

#### COMMUNICATING

Some general results of a recent winter expedition across the Rocky mountains, for the survey of a route for a roilroad to the Pacific.

JUNE 15, 1854.—Referred to the select committee on the Pacific Railroad and ordered to be printed.

# COL. FREMONT'S EXPLORATION OF THE CENTRAL RAILROAD ROUTE TO THE PACIFIC.

#### To the Editors of the National Intelligencer :

GENTLEMEN: While the proceedings in Congress are occupying public attention more particularly with the subject of a Pacific railway I desire to offer to your paper, for publication, some general results of a recent winter expedition across the Rocky mountains, confining myself to mere results, in anticipation of a fuller report, with maps and illustrations, which will necessarily require some months to prepare.

The country examined was for about three-fourths of the distancefrom the Missouri frontier, at the mouth of the Kansas river, to the Valley of Parowan, at the foot of the Wahsatch mountains, within the rim of the Great Basin, at its southeastern bend—along and between the 38th and 39th parallels of latitude; and the whole line divides itself naturally into three sections, which may be conveniently followed in description.

The *first* or eastern section consists of the great prairie slope spreading from the base of the *Sierra Blanca* to the Missouri frontier, about seven hundred miles; the *second* or middle section comprehends the various Rocky mountain ranges and inter-lying valleys, between the termination of the great plains at the foot of the *Sierra Blanca* and the Great Basin at the Parowan valley and Wahsatch mountains, where the first Mormon settlement is found, about four hundred and fifty miles; the *third* or western section comprehends the mountainous plateau lying between the Wahsatch mountains and the *Sierra Nevada*, a distance of about four hundred miles.

The country examined was upon a very direct line, the travelled

route being about fifteen hundred and fifty miles over an air-line distance of about thirteen hundred miles.

The first section.—Four separate expeditions across this section, made before the present one, and which carried me over various lines at different seasons of the year, enable me to speak of it with the confidence of intimate knowledge. It is a plain of easy inclination, sweeping directly up to the foot of the mountains which dominate it as highlands do the ocean. Its character is open prairie, over which summer travelling is made in every direction.

For a railway or a winter travelling road the route would be, in consideration of wood, coal, building stone, water, and fertile land, about two hundred miles up the immediate valley of the Kansas, (which might be made one rich continuous corn-field,) and afterwards along the immediate valley of the Upper Arkansas, of which about two hundred miles, as you approach the mountains, is continuously well adapted to settlements as well as to roads. Numerous well-watered and fertile valleys, broad and level, open up among the mountains, which present themselves in detached blocks, (outliers,) gradually closing in around the heads of the streams, but leaving open approaches to the central ridges. The whole of the inter-mountain region is abundant in grasses, wood, coal, and fertile soil. The *pueblos* above Bent's fort prove it to be well adapted to the grains and vegetables common to the latitude, including Indian corn, which ripens well, and to the support of healthy stock, which increase well and take care of themselves summer and winter.

The climate is mild and the winters short, the autumn usually having its full length of bright open weather, without snow, which in winter falls rarely and passes off quickly. In this belt of country lying along the mountains the snow falls more early and much more thinly than in the open plains to the eastward; the storms congregate about the high mountains and leave the valleys free. In the beginning of December we found yet no snow on the *Huerfano* river, and were informed by an old resident, then engaged in establishing a farm at the mouth of this stream, that snow seldom or never fell there, and that cattle were left in the range all the winter through.

This character of country continued to the foot of the dividing crest, and to this point our journey resulted in showing a very easy grade for a road, over a country unobstructed either by snow or other impediments, and having all the elements necessary to the prosperity of an agricultural population, in fertility of soil, abundance of food for stock, wood and coal for fuel, and timber for necessary constructions.

Our examinations around the southern headwaters of the Arkansas have made us acquainted with many passes, grouped together in a small space of country, conducting by short and practicable valleys from the waters of the Arkansas, just described, to the valleys of the *Del Norte* and East Colorado. The *Sierra Blanca*, through which these passes lie, is high and rugged, presenting a very broken appearance, but rises abruptly from the open country on either side, narrowed at the points through which the passes are cut, leaving them only six or eight miles in length from yalley to valley, and entirely unobstructed by outlying ranges or broken country. To the best of these passes the ascent is along the open valley of water-courses, uniform and very gradual in ascent. Standing immediately at the mouth of the Sand Hill Pass-one of the most practicable in the Sierra Blanca, and above those usually travelled-at one of the remotest head-springs of the Huerfano river, the eye of the traveller follows down without obstruction or abrupt descent along the gradual slope of the valley to the great plains which reach the Missouri. The straight river and the open valley form, with the plains beyond, one great slope, without a hill to break the line of sight or obstruct the course of the road. On either side of this line hills slope easily to the river, with lines of timber and yellow autumnal grass, and the water which flows smoothly between is not interrupted by a fall in its course to the ocean. The surrounding country is wooded with pines and covered with luxuriant grasses up to the very crags of the central summits. On the 8th of December we found this whole country free from snow, and Daguerre views taken at this time show the grass entirely uncovered in the passes.

Along all this line the elevation was carefully determined by frequent barometrical observations, and its character exhibited by a series of Daguerreotype views, comprehending the face of the country almost continuously, or at least sufficiently so to give a thoroughly correct impression of the whole.

Two tunnel-like passes pierce the mountains here, almost in juxtaposition, connecting the plain country on either side by short passages five to eight miles long. The mountains which they perforate constitute the only obstruction, and are the only break in the plane or valley line of road from the frontier of Missouri to the summit hills of the Rocky mountains, a distance of about eight hundred and fifty miles, or more than half-way to the San Joaquin valley. Entering one of these passes from the eastern plain, a distance of about one mile upon a wagon road, already travelled by wagons, commands an open view of the broad valley of San Luis and the great range of San Juan beyond on its western side. I here connected the line of the present expedition with one explored in 1848–'49 from the mouth of the Kansas to this point, and the results of both will be embodied in a fuller report.

At this place the line entered the middle section, and continued its western course over an open valley country, admirably adapted for settlement, across the San Luis valley, and up the flat bottom lands of the Sah-watch to the heights of the central ridge of the Rocky Mountains. Across these wooded heights-wooded and grass-covered up to and over their rounded summits-to the Coocha-to-pe pass, the line followed an open easy wagon way, such as is usual to a rolling country. On the high summit lands were forests of coniferous trees, and the snow in the pass was four inches deep. This was on the 14th of December. A day earlier our horses' feet would not have touched snow in the crossing. Up to this point we had enjoyed clear and dry pleasant weather. Our journey had been all along on dry ground; and travelling slowly along waiting for the winter there had been abuudant leisure for becoming acquainted with the country. The open character of the country, joined to good information, indicated the existence of other passes about the head of the Sah-watch. This it was desirable

to verify, and especially to examine a neighboring and lower pass connecting more directly with the Arkansas valley, known as the Poow-che

But the winter had now set in over all the mountain regions, and the country was so constantly enveloped and hidden with clouds which rested upon it, and the air so darkened by falling snow, that exploring became difficult and dangerous, precisely where we felt most interested in making a thorough examination. We were moving in fogs and clouds, through a region wholly unknown to us, and without guides; and were therefore obliged to content ourselves with the examination of a single line, and the ascertainment of the winter condition of the country over which it passed; which was in fact the main object of our expedition.

Our progress in this mountainous region was necessarily slow; and during ten days which it occupied us to pass through about one hundred miles of the mountainous country bordering the eastern side of the Upper Colorado valley, the greatest depth of the snow was among the pines and aspens on the ridges about two and a half feet, and in the valleys about six inches. The atmosphere is too cold and dry for much snow, and the valleys, protected by the mountains, are comparatively free from it, and warm. We here found villages of Utah Indians in their wintering ground, in little valleys along the foot of the higher mountains, and bordering the more open country of the Colorado valley. Snow was here (December 25) only a few inches deep—the grass generally appearing above it, and there being none under trees and on southern hill sides.

The horses of the Utahs were living on the range, and, notwithstanding that they were used in hunting, were in excellent condition. One which we had occasion to kill for food had on it about two inches of fat, being in as good order as any buffalo we had killed in November on the eastern plains. Over this valley country—about one hundred and fifty miles across—the Indians informed us that snow falls only a few inches in depth; such as we saw it at the time.

The immediate valley of the Upper Colorado for about one hundred miles in breadth, and from the 7th to the 22d of January, was entirely bare of snow, and the weather resembled that of autumn in this country. The line here entered the body of mountains known as the Wahsatch and An-ter-ria ranges, which are practicable at several places in this part of their course; but the falling snow and destitute condition of my party again interfered to impede examinations. They lie between the Colorado valley and the Great Basin, and at their western base are established the Mormon settlements of Parowan and Cedar city. They are what are called fertile mountains, abundant in water, wood, and grass, and fertile valleys, offering inducements to settlement and facilities for making a road. These mountains are a great storehouse of materials—timber, iron, coal—which would be of indispensable use in the construction and maintenance of the road, and are solid foundations to build up the future prosperity of the rapidly-increasing Utah State.

Salt is abundant on the eastern border, mountains—as the Sierra de Sal—being named from it. In the ranges lying behind the Mormon settlements, among the mountains through which the line passes, are accumulated a great wealth of iron and coal, and extensive forests of heavy timber. These forests are the largest I am acquainted with in the Rocky mountains, being, in some places, twenty miles in depth, of continuous forest; the general growth lofty and large, frequently over three feet in diameter, and sometimes reaching five feet, the red spruce and yellow pine predominating. At the actual southern extremity of the Mormon settlements, consisting of the two enclosed towns of Parowan and Cedar city, near to which our line passed, a coal mine has been opened for about eighty yards, and iron works already established. Iron here occurs in extraordinary masses, in some parts accumulated into mountains, which comb out in crests of solid iron thirty feet thick and a hundred yards long.

In passing through this bed of mountains about fourteen days had been occupied, from January 24 to February 7, the \*deepest snow we here encountered being about up to the saddle skirts, or four feet; this occurring only in occasional drifts in the passes on northern exposures, and in the small mountain flats hemmed in by woods and hills. In the valley it was sometimes a few inches deep, and as often none at all. On our arrival at the Mormon settlements, February 8th, we found it a few inches deep, and were there informed that the winter had been unusually long-continued and severe, the thermometer having been as low as 17° below zero, and more snow having fallen than in all the previous winters together since the establishment of this colony.

At this season their farmers had usually been occupied with their ploughs, preparing the land for grain.

At this point the line of exploration entered the third or western section, comprehending the mountainous plateau between the Wahsatch mountains and the Sierra Nevada of California. Two routes here suggested themselves to me for examination: one directly across the plateau, between the 37th and 38th parallels; the other keeping to the south of the mountains, and following for about two hundred miles down a valley of the Rio Virgen-Virgin river-thence direct to the Tejon Pass, at the head of the San Joaquin valley. This route down the Virgin river had been examined the year before, with a view to settlement this summer by a Mormon exploring party under the command of Major Steele, of Parowan, who (and others of the party) informed me that they found fertile valleys inhabited by Indians who cultivated corn and melons, and the rich ground in many places matted over with grape-vines. The Tejon Passes are two, one of them (from the abundance of vines at its lower end) called Caxon de las Uvas. They were of long use, and were examined by me and their practicability ascertained in my expedition of 1848-'49; and in 1851 I again passed through them both, bringing three thousand head of cattle through one of them.

Knowing the practicability of these passes, and confiding in the report of Major Steele as to the intermediate country, I determined to take the other, (between the 37th and 38th parallels,) it recommending itself to me as being more direct towards San Francisco, and preferable on that account for a road, if suitable ground could be found; and also as being unknown, the Mormons informing me that various attempts had been made to explore it, and all failed for want of water. Although biased in favor of the Virgin river route, I determined to examine this one in the interest of geography, and accordingly set out for this purpose from the settlement about the 20th of February, travelling directly westward from Cedar city, (eighteen miles west from Parowan.) We found the country a high table land, bristling with mountains, often in short isolated blocks, and sometimes accumulated into considerable ranges, with numerous open and low passes.

We were thus always in a valley, and always surrounded by mountains more or less closely, which apparently altered in shape and position as we advanced. The valleys are dry and naked, without water or wood; but the mountains are generally covered with grass and well wooded with pines. Springs are very rare, and occasional small streams are at remote distances. Not a human being was encountered between the Santa Clara road near the Mormon settlements and the *Sierra Nevada*, over a distance of more than three hundred miles. The solitary character of this uninhabited region, and naked valleys without water courses, among mountains with fertile soil and grass and woods abundant, give it the appearance of an unfinished country.

Commencing at the 38th, we struck the Sierra Nevada on about the 37th parallel about the 15th March.

On our route across we had for the greater part of the time pleasant and rather warm weather; the valley grounds and low ridges uncovered, but snow over the upper parts of the higher mountains. Between the 20th of February and 17th of March we had several snow storms, sometimes accompanied with hail and heavy thunder; but the snow remained on the valley grounds only a few hours after the storm was over. It forms not the least impediment at any time of the winter. I was prepared to find the Sierra here broad, rugged, and blocked up with snow, and was not disappointed in my expectation. The first range we attempted to cross carried us to an elevation of 8,000 or 9,000 feet and into impassable snow, which was further increased on the 16th by a considerable fall.

There was no object in forcing a passage, and I accordingly turned at once some sixty or eighty miles to the southward, making a wide sweep to strike the *Point of the California mountain* where the Sierra Nevada suddenly breaks off and declines into a lower country. Information obtained years before from the Indians led me to believe that the low mountains were broken into many passes, and at all events I had the certainty of an easy passage through either of Walker's passes.

When the Point was reached I found the Indian information fully verified: the mountain sudden terminated and broke down into lower grounds barely above the level of the country, and making numerous openings into the valley of the San Joaquin. I entered into the first which offered, (taking no time to search, as we were entirely out of provisions and living upon horses,) which led us by an open and almost level hollow thirteen miles long to an upland not steep enough to be called a hill, over into the valley of a small affluent to Kern river; the hollow and the valley making together a way where a wagon would not find any obstruction for forty miles.

The country around the passes in which the Sierra Nevada here terminates declines considerably below its more northern elevation. There was no snow to be seen at all on its eastern face and none in the pass; but we were in the midst of opening spring, flowers blooming in fields on both sides of the Sierra.

Between the point of the mountains and the head of the valley at the Tejon the passes generally are free from snow throughout the year, and the descent from them to the ocean is distributed over a long slope of more than two hundred miles. The low dry country and the long slope, in contradistinction to the high country and short sudden descent and heavy snows of the passes behind the bay of San Francisco, are among the considerations which suggest themselves in favor of the route by the head of the San Joaquin.

The above results embody general impressions made upon my mind during this journey. It is clearly established that the winter condition of the country constitutes no impediment, and from what has been said the entire practicability of the line will be as clearly inferred. A fuller account hereafter will comprehend detailed descriptions of country, with their absolute and relative elevations, and show the ground upon which the conclusions were based. They are contributed at this time as an element to aid the public in forming an opinion on the subject of the projected railway, and in gratification of my great desire to do something for its advancement. It seems a treason against mankind and the spirit of progress which marks the age to refuse to put this one completing link to our national prosperity and the civilization of the world. Europe still lies between Asia and America; build this railroad and things will have revolved about; America will lie between Asia and Europe-the golden vein which runs through the history of the world will follow the iron track to San Francisco, and the Asiatic trade will finally fall into its last and permanent road, when the ancient and the modern Chryse throw open their gates to the thoroughfare of the world.

I am, gentlemen, with much regard, respectfully, yours,

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J. C. FREMONT.

WASHINGTON, June 13, 1854.