

RATON MOUNTAIN COAL MINES. — General Wm. J. PALMER, one of the ablest and most energetic officers of the Union Pacific Railway Company, E. D., is now (Sept., 1867) on a tour of reconnoissance and observation in the country between the valley of the Smoky Hill and the Rio Grande. He finds that as regards routes there is no difficulty, as the road can be run either through or around the Raton mountain. In a letter from Fort Union, in New Mexico, he speaks of the vast deposits of coal found on that range and in the region adjacent, and of the agricultural and pastoral character of that country. We have only room for a brief extract. He says:

“Dr. Le Conte has just arrived from his examination of the coal-field, and his report is very satisfactory. There is abundance of good coal — very good coal — on both sides of the Raton mountain, which can be readily reached from the railroad line. On this side of the mountain the coal extends to within thirty miles of this place, and probably farther. Here, then, is the great natural depot of fuel, not only for this Pacific Railway, but for the country contiguous to it for at least as far east as Fort Harker, and as far west as — well, that depends upon further explorations.

“The country in and contiguous to the Raton mountain is the finest grazing country I have ever seen. I don't think it can be excelled; and on this side the ground is very fertile, and with very little labor fine crops of wheat, corn, oats and other grains are grown.”

General Palmer, in a letter of a still later date, speaks of the *anthracite* coal mines of New Mexico, which, as I have already stated, (page 69,) are located but a comparatively short distance from this line of road. He was about to visit them.

There seems to be some degree of correspondence between the coal formations of New Mexico and those of Pennsylvania. On the slopes of the mountains, their foot-hills and declining plains, bituminous coal in great abundance is found, as in Western Pennsylvania; while more in the heart of the mountain system, as in Central Pennsylvania, the anthracite variety is found. It is very probable that the bituminous variety is little, if any, less in quantity in New Mexico than in Western Pennsylvania; but as to the quantity of the anthracite, the explorations and researches have not been sufficiently extended to warrant any comparative estimate.

But from the fact that coal abounds in the line between Pond Creek and Denver, and on and around the Raton Mountain, we may safely conclude that it is confined to no narrow locality; but is found, as in Western Pennsylvania, in many distinct and widely separated localities, in deposits of from five to fifty miles in extent, and in veins of from a few inches to ten and even fifteen feet in thickness. These coal beds, as in Western Pennsylvania, lie in nearly horizontal strata.

But for any practical utility to the country, these rich mines might as well be in the moon as where they are, until a railway shall be constructed through that country by which their products can be carried both east and west — to the rich agricultural region in one direction, and to the rich mineral regions in the other. Without a railroad, they are simply worthless; but with one, they will be a source of incalculable national wealth, and will contribute largely to the success of this great railroad enterprise.

ANALYSIS OF RATON MOUNTAIN COAL.

PHILADELPHIA, August 5, 1867.

To the Union Pacific Railway Co., E. D.:

The sample of coal from Raton Mountain yields on analysis as follows:

Moisture, at 212° Fahrenheit,	4.74
Sulphur,	.16
Volatile matter,	37.20
Fixed carbon,	53.90
Ash,	4.00
	———— 100.00

The above analysis shows a yield at the rate of 437.6 lbs. of illuminating gas per ton of 2000 lbs., which is equivalent to 7439.2 cubic feet. You will see from the above that your coal compares very favorably with any of those regarded as the best for steam-generating purposes, and with the majority of those used for the manufacture of illuminating gas.

WILLIAMS & MOSS,

Analytical and Consulting Chemists.

COAL ON THE PACIFIC SLOPE. — Mr. W. M. Gabb, in a report made to J. Ross Brown, Esq., remarks: “The great coal-bearing formations of the world, those from which the coals of Pennsylvania and the Mississippi Valley are obtained, are not represented on the Pacific Slope of the North American continent.” He, however, mentions several mines of coal of inferior quality on that slope, one on Mount Diablo, in Southern California, a part of the Coast Range, of which he says: “There is here at least one bed of coal of considerable size, but very poor quality and variable thickness. Furthermore, it is so broken and twisted by the disturbing forces to which the rocks of the vicinity have been subjected, that, even were the coal good in quality, the vein could not be relied on.”

MINERAL WEALTH OF SOUTHERN CALIFORNIA. — On this subject I beg leave to refer the reader to the Report of J. Ross Brown, Esq., upon the Mineral Resources of the States and Territories west of the Rocky Mountains, recently published by authority of Congress, especially copper, (page 138 *et seq.*) and quicksilver, (page 170 *et seq.*)

COPPER MINES IN ARIZONA. — J. Ross Brown, Esq., in his Report to the Secretary of the Treasury, upon the Mineral Resources of the States and Territories west of the Rocky Mountains, recently published, says: