Engineer and Police Department:

The charges under this head are embraced in the Company's books under the heads of Surveys, Graduation, Masonry, Railway Tracks, Bridge Superstructures, Depots, and Contingencies, from which, it will be seen, they are deducted in the above statements. The aggregate expense is as follows:

Surveys,	$73,360
Superintendence of Construction,	179,518
Police, (part of it borne by Company)	20,491
	$273,369

The item of Surveys did not enter at all into the original estimates of cost, although they appear in the following summary for the purpose of comparison.

The only remaining heads of Expenditure consist of

Engineer's Houses,		$6,073
Coal Mines,		10,194
Contingent Expenses,	$34,484	
Deduct Engineer Department,	5,030	
		29,454
And amounting in the whole to		$45,721

The first two of the above items are carried on the books to the Real Estate account. None of the three items have corresponding particulars in the original estimates, and consequently there can be no comparison with them. The opening of coal mines was not then contemplated. The houses erected for the shelter of the Engineers superintending the costruction, have since been used by the Supervisors and hands; and it has been found necessary to put up a number of buildings in addition, for a similar purpose, which have gone into the construction account, (under the head of "Railway Tracks,") although not specifically estimated for.

Recapitulating the preceding details, the following is the result:

Heads of Expenditure.	*Original Estimate.*	*Actual Cost.*	*Difference.*
Surveys,	$73,360	$73,360 =	———
Graduation,	4,105,996	4,025,677 —	$80,319
Masonry,	536,213	713,879 +	177,666
Bridge Superstructures,	175,000	182,127 +	7,127
Railway Tracks,	2,000,000	1,888,846 —	111,154
Depots and Water Stations,	105,750	296,223 +	190,473
Right of Way,	100,000	150,209 +	50,209
Miscellaneous,	28,329	245,730 +	217,401
	$7,124,648	$7,576,051 +	$451,403

The final excess of expenditures over original estimates in the preceding detailed comparison of specific items is $451,403, or 6⅓ per cent. upon the estimates, which will be admitted to be a moderate increase upon a work of such magnitude, complication and difficulty.

To make the total of the column of "Original Estimates" agree with that of page 12, and which is $7,301,288, we must deduct from the latter $250,000, the original estimate for Tunnel Arching, and add $73,360 for Surveys. To make the total of the column of "Actual Cost" agree with that of page 9, and which is $8,065,385, we must deduct from the latter $300,000, the present estimate for Tunnel Arching—$185,000 for "Station Grounds and Buildings," and $4,334 for Miscellaneous Expenditures. These several items are not included in the table, the object of which was to compare the estimated and actual cost as specifically as possible, and not to include particulars resting as yet in estimate only.

If, however, we discard these details and look only to the general aspect of the comparison, we find that an expenditure of $139,420, or about *two per cent. within* those estimates was sufficient to open the track for use, and that with the subsequent expenditure of upwards of half a million of dollars, in perfecting and maintaining the work, the excess has swelled to but 6 per cent. beyond the estimates, and finally, that when all the projected works above specified are finished and the Road supplied with appurtenances necessary to its business, the iecrease will amount to no more than the difference between $8,065,385 and $7,374,648, or $690 737, which is 9⅓ per cent. upon an estimate obviously never intended to provide for many of them.

It becomes me, however and every Engineer, frankly to admit, that after all that can be said in justification of shortcomings in estimates indulgence must be asked for errors inseparable from what is necessarily so subject to contingencies beyond human foresight or control.

In speaking of the additional charges against the Construction account since the opening of the Road, I have used the term "maintenance," inasmuch as the cost of adjustment of 92 miles of track for a period of one year, has been carried to that account, with an outlay of 1,082 per mile. In addition to this charge against "Construction," there has been charged to the "Repair" account a total amount of $160,626 55, which sum represents the maintenance of of 188 miles of Road for a period of one year at the rate 854 per mile per annum.

The expenses of maintenance began to be charged to the "Repair" account at the following periods, for the divisions of the Road enumerated below, viz:

From Cumberland to Cranberry Summit,	63 miles,	Oct. 1, 1851
" Cranberry Summit to Fetterman,	40 miles,	July 1, 1852
" Fetterman to Fairmont,	20 miles,	March 1, 1853
" Fairmont to Wheeling,	78 miles,	October 1, 1853