

The location of this road through a section of country scarcely exceeded by any mountainous district for extreme irregularity of surface and rudeness of scenery, was a task of great labor. The difficulty of adjusting the directrix of the road to the steep hill sides—broken into every kind of irregular shape by deeply indented ravines and bold prominences; and the still greater difficulty of projecting it across the sinuosities of the streams and valleys, in such a manner as to avoid their abrupt curvatures, and at the same time diminish as much as possible the cost of construction; called at every step for the exercise of matured judgment and patient investigation. The line now adopted will, I trust, fully justify the pains bestowed upon it. Though urged forward with the utmost determination, even during the inclemency of the past winter, the location was not finally accomplished till July last.

The distance from Baltimore to York, including 12 miles of the old road to Timonium, was then ascertained to be 55 1-2 miles; exceeding that by the York Turnpike about 5 1-2 miles when both are measured from the same termini.

The radius of curvature is not less than 1000 feet, except in three instances where, from peculiar circumstances it was reduced to 800 feet.

A determination to avoid the use of stationary power on the summit, at any reasonable cost, as expressed in my last annual report, was persevered in, and the road now passes over an elevation of more than 800 feet above mean tide, with an inclination on the north side of the ridge not exceeding 60 feet per mile.

The heaviest burthens passing over the road will be drawn from York to Baltimore, and must therefore surmount the ridge on its northern side. Hence the rate of inclination on this side was obviously the paramount consideration. It has accordingly been reduced as low as the formation of the country would admit, without the alternative of enhancing the cost of the road to an extent which would not be commensurate with the very slight additional reduction that could be effected in the grade at this point. The inclination of the road on the south side of the ridge, descending towards Baltimore, being less important, from considerations of economy—slightly exceeds that on the other side. On the part of the road the gra-