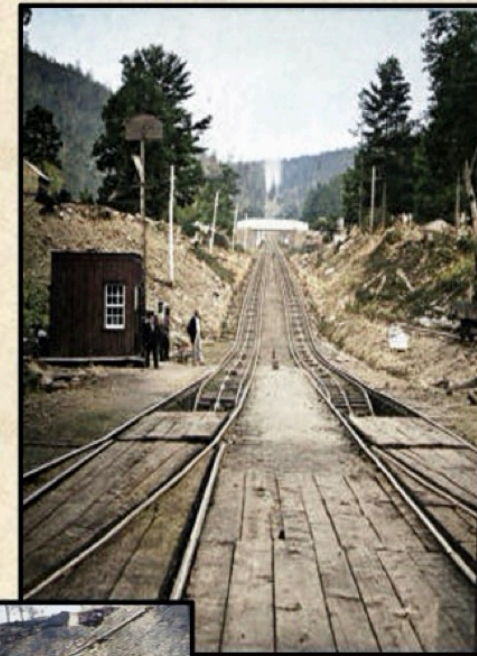
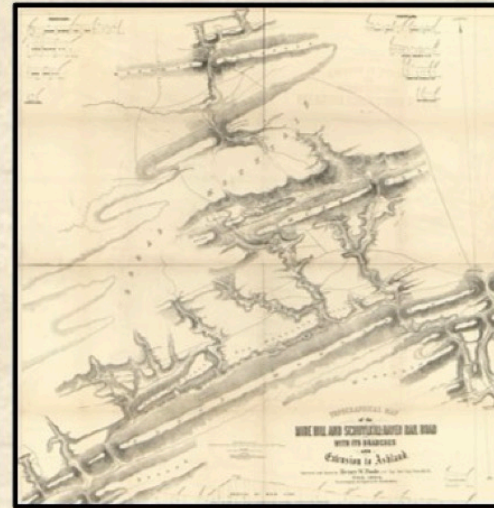


William S. Coulter (1827-1899) was born in England and came to the US with his family in 1842. He worked in Pottsville as a blacksmith for several years and in 1846 he began learning engineering under Samuel B. Fisher.

Through the 1830s and 40s, short railroads sprouted up in Schuylkill County. The largest of them was the Mine Hill and Schuylkill Haven, which served the Schuylkill Canal. Coulter joined it as division engineer in 1851 and advanced to Master of Machinery, while building the Gordon planes.

One of the most curious features of these early railroads were inclined planes. These were segments of tracks which climbed mountainsides on steep grades with freight cars being lifted by cable.



GORDON PLANES

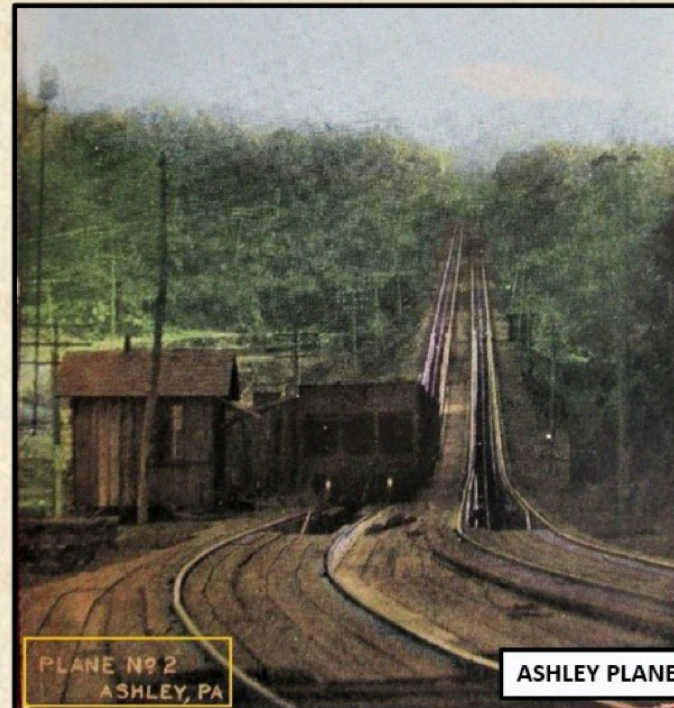




The Ashley Planes was an early freight cable railroad along three separately powered inclined plane sections between the Lehigh and Susquehanna watersheds initially built in 1838 by Lehigh Coal & Navigation Company's subsidiary Lehigh and Susquehanna RR. In the 1860s the Planes had deteriorated, and improved equipment had been developed.

Coulter went to Ashley and engineered the building of the L&S central shops and realigning and rebuilding of the three planes, using experience and developed technologies.

He retired in about 1880 and was later employed as borough engineer.



ASHLEY PLANES

