

heavy and protracted storms is being repaired. The second short tunnel in Niles Canyon is being cemented and a portion of the long tunnel is also to be soon cemented. The short tunnel was the scene of a very bad cave-in last January.

*Contracts Already Let.*—Contracts have been let by the Chicago, Milwaukee & St. Paul for its terminal line at Tacoma, to cost \$250,000, and in connection a big car ferry is to be operated. In addition a lumber dock is to be built, which will require 2,000,000 feet of big timber besides 4,000 creosoted piles.

*Sufficient Funds Raised.*—David H. Moffat has announced that he has raised a sufficient sum in New York to finance the projected Denver, Northwestern & Pacific. Mr. Moffat says he does not intend to extend the road at present, but will let it rest where it is at Steamboat Springs. At some future time construction will be resumed and the road built to Salt Lake City. He positively denies the rumors that the road has been sold to Harriman, Hill, Gould or Clark.

*Will Shorten the Line.*—The Northern Pacific intends to shorten its line by several miles between Missoula and Spokane, and making the ultimate connection of the company's line from Wallace to the Coeur d'Alene branch at Coeur d'Alene, Idaho.

One of the most troublesome pieces of road the Northern Pacific has had to contend with is the line over the mountains between Wallace and Missoula. Much of the grade is 4 per cent. and the curves are heavy in winding over the mountains. A tunnel through some advantageous portions of the mountains would eliminate a large portion of the heavy grade and shorten the distance 25 miles or more.



### **Licensing Locomotive Engineers.**

It is rumored about several of the state legislative halls that a movement in the direction of the licensing of locomotive engineers is being drafted. Several of the States have provided in this way for stationary engineers and the United States government looks after the marine engineers. It is safe to say that, had the only owners of steam plants and of steamboats been efficiently organized corporations from the time steam commenced to be used as a motive power,

there would have been no necessity for license laws. It is the operator who financially suffers most through the mistakes of ignorant engineers, and knowing this fact the corporation organization does not furnish a berth to the ignorant man, except in positions of no responsibility. A license law could add nothing to the intelligence of railroad engineers unless it begins where present methods leave off; and it is not often argued that present-day engineers are insufficiently educated and experienced for their positions. There is no state license law which compels a man to fire a boiler for more than three years before he is allowed to take his examination. It would be strange indeed, therefore, if a locomotive engineer could not pick up the requisite knowledge of the peculiarities of a steam boiler in the five to eight years of firing which he gets. It is safe to say that the railroad engineers have to pass examinations of far wider scope and application than do any of the engineers in the stationary or marine field and it is difficult indeed to see how any benefit can result from an extension of the license laws to include railroad engineers. It is needless to say that the benefits would have to be many and immediately certain before the disadvantages of such a handicap were offset.—*Railway and Engineering Review.*



### **Convention of the American Railway Engineering and Maintenance of Way Association.**

The American Railway Engineering and Maintenance of Way Association held its tenth annual convention at the Auditorium Hotel, in Chicago, Ill., beginning March 16th last. President William McNab called the opening session to order and in his address to the convention spoke as follows:

Your association has completed a decade of active work, and during that period has made an enviable record, and now occupies a prominent position in the front rank of railway organizations and engineering societies.

The advantage gained by this status turns on the beneficial influence it exerts in connection with the objects of the association—the advancement of knowledge pertaining to the scientific and economical location, construction, operation and maintenance of railways—an influence which has been imparted to the railway world in a degree of usefulness, univer-