

## New Ideas in Sleeping Cars To Make Night Travel Easy

**B**ACK in 1860, when a man went away to do overnight traveling by railroad, his family felt that he would never be quite the same again. Night traveling then was done in day coaches. Survivors reported that an hour spent this way seemed to take up six hundred minutes, and that destinations appeared to lead the trains a merry chase instead of waiting to be arrived at.

Nor did the Pullman sleeping cars rival the home as a nice place in which to spend the night. They were indifferent mobile bedrooms, illumined by candles and heated by coal stoves, and the washing facilities were not so good as those in the hall room of the third best hotel in a town of 2,000 population.

The upper berths were supposed to have been designed by the man who drew the plans for the rack employed in the Spanish Inquisition. Tom Thumb was said to have served as the model for them. After a night in an upper it took a fortnight for a tall man to become fully unraveled.

The sleeping car of today is as different from those first cars as the current crop of automobiles is from the

one-cylinder affairs that were cranked on the side. According to F. A. Cooke, Superintendent for the Pullman Company at the Grand Central Terminal, research and experiment are constantly carried on by the company with a view to making its cars as reposeful as possible. Several recent innovations have brought the sleepers to a point where at least a modest degree of the elusive state of perfection is in sight. Regardless of the frayed condition of a passenger's nerves, passage by Pullman is becoming painless.

### Constantly Experimenting.

Mr. Cooke declared that he regarded the latest change in sleeping car construction as of unusual interest to the traveling public, since it altered the entire aspect of the interior of the car. The headboards, separating one upper berth from another when the cars are made up for the night, now serve also as partitions dividing the twelve sections of seats by day.

In the past the headboards were folded into the upper berths during the day. As permanent fixtures they now make for privacy in the seats. The boards extend to the top of the car. During the day they are not so wide as the seats, but when the berths are made ready a sliding panel, fitting into the partition, is pulled out to the end of the seat. Cars equipped in this way have been accepted for use on the Twentieth Century Limited and other important runs. Experimental work on them covered more than two years.

To insure adequate lighting for each section of seats between nightfall and time to retire, hundred-watt nitrogen lamps have been placed in the ceiling at frequent intervals throughout the car. When the big lights are turned out, lamps in the floor, one at each section, are turned on, warning those passing through the car of the presence of a grip or other obstacle in the aisle. The women's dressing room on these new cars has been enlarged and equipped with more mirror space than before.

"We turn out Pullman cars in lots of ten or twenty," Mr. Cooke said, "and we try to embody a few new and attractive features in each group. It can be safely said that no two groups of Pullman cars are identical. We are often governed in the improving of the cars by the suggestions of passengers. The views of veteran travelers carry weight with us.

"Our job is a big one. For the fiscal year ending July 31, 1923, we carried more than 33,000,000 passengers, more than 90,000 a day. We employed 21,200 persons and operated almost 6,000 cars as a daily average. Our cars covered a total of more than 850,000,000 miles in that period, an average of 400 miles a day for a car.

"It is probably true that making travel as painless as possible has accounted, to a great extent, for these imposing figures. People like the idea of getting from one place to another with no more hardship than if they had stayed at home—perhaps with even less.

"We do not know what the ultimate will be in Pullman sleeping cars. We hesitate to say that we have even approached it. Even adding improvements for sixty years or so has still left room for more of them, and we shall continue experimenting."

### TIDES USED FOR POWER

**W**ITH the claim that it is the first to use the tides successfully in the generation of electricity, a hydroelectric plant employing this principle has been set up at East Saugus, near Lynn, Mass. The plant, which is the invention of Domenico Damiano of Boston, was begun two years ago and was completed and put in operation early in the present year. It consists of a small power house above a well on an arm of the Saugus River, in which is a turbine set in motion by the ebb and flow of the tide. About sixty-five horse power is generated by a dynamo rigged to the turbine. The plant was financed largely by Italian residents of Massachusetts.