*Puzzle provided by Kordemsky: The Moscow Puzzles (Dover)*

The odometer of the family car shows 15,951 miles. The driver noticed that this number is palindromic: it reads the same backward as forward.

"Curious," the driver said to himself. "It will be a long time before that happens again."

But 2 hours later, the odometer showed a new palindromic number.

How fast was the car traveling in those 2 hours?
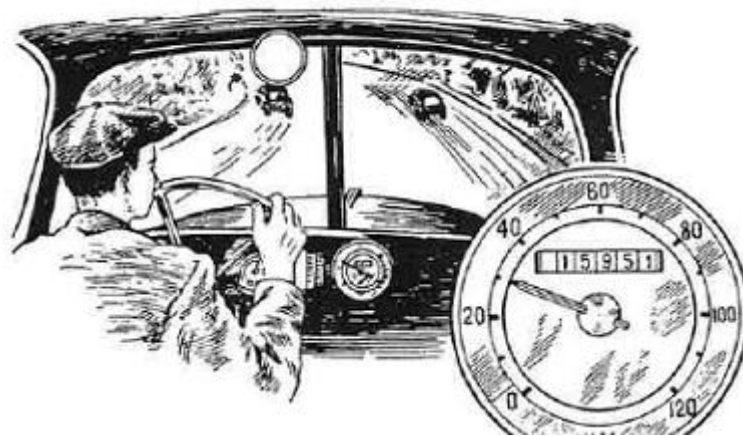
Solution: 55 miles per hour.

The first digit of 15,951 could not change in 2 hours. Therefore, 1 is the first and the last digit of the new number. The second and fourth digits changed to 6. If the middle digit is 0, 1, 2, ..., then the car traveled 110, 210, 310, . . ., miles in 2 hours. Clearly the first alternative is the correct one, and the car traveled 55 miles per hour.