

Tom Marshall's Weekly News, November 5, 2007

Head Winds and Tail Winds: Cyclists and drivers of steam cars are well aware of the difference between a head wind and a tail wind and also where the hills are. In a Stanley car, a tail wind pushes you along in grand style, but a head wind is a detriment to overcome. Since a Stanley engine develops much more horsepower than the car's boiler and burner produces, the resistance of a strong head wind slows the car down, requires more energy to push it along, and therefore uses more steam, which increases fuel and water consumption. Two examples to illustrate this point occurred on the "Trans-Con" tours of 1972 and 1989 in our 1912 Stanley Model 87.

Fulfilling a 25-year-old dream, the record-breaking tour from June 13 to August 9, 1972, in our 1912 Model 87 allowed me to learn about long distance touring in a Stanley. The planned route took us from Yorklyn to Montreal, Tijuana (Mexico), and return, which turned out to be 8,328 miles. Traveling in the latitude of the westerlies, it was expected that head winds would be encountered, especially across the Great Plains and the Salt Lake Basin while traveling westbound. However, it was reasonable to expect that this condition would provide tail winds on our eastbound return. It didn't work out that way. Going west across northern South Dakota on a very hot day in late June, we had planned to make over 300 miles between Aberdeen and Baker, Montana. The sun bore down, and the west wind blew. We left at 5:00 A.M. and arrived just before dark about 9:00 P.M. Our run to the first anticipated water stop at Mobridge on the Missouri River was 100 miles, and our speed was reduced to 25 M.P.H. to stretch water mileage. Two-thirds of the way along, we realized we would not make it and were lucky to find a small town off the highway at the 80-mile mark, where we took on about 20 gallons of water (we carried 100 gallons total). The strongest head winds, however, were faced when crossing Nevada from Wells to Reno. 40 M.P.H. winds are common in this part of the country, and they did not disappoint us.

This phenomenon was surely going to work to our advantage on the return trip. I had thought we could breeze home from Estes Park, Colorado, dropping from an elevation of 7,500 feet to nearly sea level with winds in our back. However, before we reached the Nebraska line, a storm had settled over the central part of the country, and the counter-clockwise flow around a low pressure area gave us rain and east winds for two or three days. This also required the top to be up, in itself creating a holding effect. We couldn't win, but it was still a very successful trip.

When the 1989 "Trans-Con" ended at Ellsworth, Maine, however, fate was on our side as we headed for home. Driving 160 miles to Portland the first afternoon, we prepared for the next leg to Danbury, Connecticut. As the sun came up in Portland, a strong northeast wind came with it, and it pushed us along in grand style. When we stopped for water at Worcester, Massachusetts, we had covered 138 miles on our water supply. Filling our tanks here, we easily made 122 miles more to Danbury before we needed water again. Ruth was excited that we kept up with modern traffic through the Hartford area, moving along at 55 M.P.H. The Stanley was running well, but the tail wind played no small part.