Gear Museum Road Trip

hat's the perfect vacation destination for a gear aficionado? Aspen? Too trendy. Miami? Too humid. For a true machinery enthusiast, the perfect vacation is a gear museum road trip.

Like Caribbean island-hoppers, gear road trippers can send postcards from their many destinations.

First stop-Dearborn, MI, site of the Henry Ford Museum and Greenfield Village. The 12-acre museum is described as "a haven for mechanical engineering nuts." The museum is home to steam locomotive repair facilities as well as Thomas Edison's Menlo Park labs (where the light bulb was invented) and Ford's workshops. The museum also contains old cars, steam engines and restored 1880s factories.

Manufacturing machinery is held in the museum's "Made in America" exhibit. Most of the equipment falls into the category of production manufacturing. Among other things, the exhibit houses the manufacturing equipment for the Model T cars. Other gear equipment is still in storage at the museum, like a gear cutting machine from the 1890s and various Gleason and Bilgram gear cutting machines. Gears exist within the museum in grandfather clocks, steam engines and various other locations within the museum. In addition, curators boast of a generator that stands two stories high.

The Midwest is home to plenty of other gear-related destinations. Among the more famous is Chicago's Museum of Science and Industry. A permanent fixture at the museum is the "Animated Industrial Gears" exhibit, which showcases gears and motion devices from Borg-Warner Corp.'s exhibit at the Century of Progress International Exposition in 1933. One feature is Cartwright's straight line mechanism, which has two gears and two connecting arms of equal size, as well as historic motion devices.

After that quick stop in the Windy City, start caravaning eastward to New England. It's a long drive to Windsor, VT, but well worth it. Once there, postpone the skiing and try the American Precision Museum.

There, you'll find engineering masterpieces, like two gear measuring machines for involutes developed by Fellows Corp. (the company founded by gear pioneer Edwin R. Fellows, inventor of the gear shaper machine). You'll also find gear milling machines that date as far back as 1836 and one from Ezra Gould's 1858 collection.

According to collections technician John Alexander, most of the visitors at the American Precision Museum are retired machinists and engineering professionals. A real crowd pleaser is the demonstration of indexing on a benchtop miller. The process involves milling gears on a 1/8" piece of brass with the museum's name and Windsor, VT, stamped on it. Museum attendees can take the makeshift gears home as souvenirs of the day.

Don't spend all your money on souvenirs in Vermont, though. The gift shop at The Smithsonian Institution in Washington, D.C., probably has lots of memorabilia available for purchase. Although it's more well-known for the First Lady exhibit or the Hope diamond exhibit, the Smithsonian also houses a wing called "Engines of Change: The American Industrial Revolution, 1790-1860." In those halls, you can find wheels, steam powered machines. and replicas from machine shops. A special highlight of this stop is seeing gears constructed of five species of wood.

For those people who want the complete gear-themed road trip and are will-



These antique gears at The Smithsonian Institution's "Engines of Change" exhibit are constructed with five species of wood.

ing to spend some lira, the Leonardo Museum located inside a medieval castle in Vinci, Italy, is the ultimate culmination to this trip. At the museum's opening in 1953, the first exhibit was dedicated to models of machines inspired by da Vinci's designs. Today, the museum is home to more than 50 models, many of which include various types of gears.

How to cross the Atlantic during a road trip is up to you. But, you're a gear pro; you know how to solve difficult problems. O

Tell Us What You Think . . . Visit www.geartechnology.com to

- · Rate this column
- · Request more information
- . Contact the organizations mentioned
- Make a suggestion

Or call (847) 437-6604 to talk to one of our editors!