

Gears in Congress & Other Odd Places

Gear Technology's bimonthly aberration — gear trivia, humor, weirdness and oddments for the edification and amusement of our readers. Contributions are welcome.

Mr. Gear Goes to Washington

As the authority on gears of all sizes, shapes and political persuasions, *Gear Technology* tracks down information about the most important gears in the world. In this issue, a history lesson. **John Henry Gear** was a U.S. Senator from Iowa from 1895–1900.

Gear was born April 7, 1825, in Ithaca, NY, the son of an Episcopal clergyman. In 1843, he moved to Burlington, IA, where he began a successful career as a wholesale grocer. He also became heavily involved in the railroad business. He was the founding president of the Burlington, Cedar Rapids and Minnesota Railroad.

Gear's public career began when he was elected mayor of Burlington in 1863. In 1871 he was elected to the Iowa General Assembly, where he served three terms. In 1873 he was elected Speaker of the House after a two-week debate. After two terms as Speaker of the Iowa House, **Gear** was elected governor of Iowa, where he served from 1878 to 1881.

From there, **Gear** moved on to Washington, serving in the House of Representatives from 1887 until 1891. After a brief stint as assistant secretary to the Treasury in 1892 and 1893, he was re-elected to the House.

Finally, **Gear** served the United States Senate from 1895 until 1900, where he was chairman of the Committee on Pacific Railroads. Although he was re-elected for a second term, he died July 14, 1900, before the term began.

Gears Online

With all the hoopla surrounding the Internet these days, it's no surprise that new web sites are opening every day. *Gear Technology* is pleased to announce that there is now a home page called GEARS. But before the hoopla gets out of hand at your office, let us warn you: it's not what you think.

The Global Entomology Agricultural Research Server (GEARS) is a new web site devoted to—you guessed it—bugs. The server is provided by the USDA-ARS laboratory and includes the largest online collection of bee- and pollination-related information available. You can browse the art gallery of fascinating insect photographs, learn about the latest beekeeping techniques or listen to live recordings of bugs in their native environments.

You can log on to GEARS at <http://gears.tucson.ars.ag.gov/>, but if you leave a question on their bulletin board about the involute modification on your latest gear design, don't expect an answer any time soon.

Answers to Last Month's Puzzle

Use the chart below to help determine the probabilities for the next Wacky Widgets gearmotor. Assuming shelf A holds one spur and one helical gear, and shelf B holds two spur and one helical gear, the 6 lines represent the six different combinations of gears that are possible. S=Spur and H=Helical.

	Shelf A	Shelf B
1.	S	S1
2.	S	S2
3.	S	H
4.	H	S1
5.	H	S2
6.	H	H

Thus we can see that the chances of one spur and one helical gear are 3 in 6, or 50% (lines 3, 4 and 5), and the chances of two spur gears are 2 in 6, or 33 1/3% (lines 1 and 2). The chances of the foreman throwing up are zero.

After all, he is a trained professional (don't try this at home).

Patriotic Gears

In celebration of U.S. Independence day, patriotic gear manufacturers can take heart in the fact that gears are doing their part to protect the nation.

There are approximately 576,000 gears in service as components of the U.S. Army's fleet of 7,775 helicopters, according to INFAC, the Instrumented Factory for Gears, a research organization sponsored by the U.S. Army Aviation and Troop Command at the IIT Research Institute in Chicago. ⚙

