

Watch This Space

Addendum, Gear Technology's bimonthly aberration, will appear in this space. It is a collection of gear trivia (as opposed to trivial gearing), humor, puzzles, weirdnesses and oddments for the edification and amusement of our readers. Contributions are welcome.

Good References

In the 7th Edition of the *McGraw Hill Encyclopedia of Science and Technology*, 10 pages are devoted to the subjects of **Gears**, **Gear Cutting** and **Gear Trains**. The entries are found between those on *Gaviforms*—"a small order of aquatic birds that contains a single living family, the *Gavidae* (loons)" and *Gecko*—"the name for about 300 species of reptiles that form the family *Gekkonidae*. . . ." We trust the placement of gears between loons and lizards was the result of the constraints of the alphabet and not an editorial comment. Where's the SPCGE (Society for the Prevention of Cruelty to Gear Engineers) now that we need them?

Gearing gets more thorough treatment (and more propitious placement) in the 9th edition of *Marks Standard Handbook for Mechanical Engineers*, where 22 pages are devoted to it. The 24th edition of *Machinery's Handbook* contains practically an introductory gear course with a whopping 247 pages devoted to the subject.

Don't Throw Away Those Blueprints!

They could be worth money someday, say, \$30.8 million. That's what Microsoft's Bill Gates (who by the end of the year will announce the purchase of the entire world) spent last November for one of Leonardo da Vinci's notebooks containing ideas on hydraulics, astronomy, geography, geology and mechanics. The notebook, written between 1506 and 1508, contains more than 300 illustrations.

Among other things, the *Codex* contains discussions of the principles of steam power and engineering designs for the snorkel and the submarine.

Christie's of London, the auction house that handled the sale, earned a \$2.8 million commission on the deal.

Yes, but Can He Play on the Company Softball Team?

The first gear-cutting machine on record was built by one Juanelo Torriano of Cremona, Italy, who went to Spain in 1540 to build a large planetary clock for Emperor Charles V. It took him 3½ years to build the clock, which contained 1,800 gear wheels. According to a contemporary report,

PUZZLING SCALES



1 glass, 1 saucer



3 saucers



How many glasses will balance the bottle?

Get Out Your Calculators. . .

The following puzzle appeared in Sam Loyd's *Cyclopedia of Puzzles* in 1914. Can you find the solution? If not, the answer will appear in our next issue. (From *More Joy of Mathematics* by Theoni Pappas, ©1989. Reprinted by permission of Wide World Publishing/Tetra, San Carlos, California.)

"Every day he had to make . . . more than three wheels that were different in size, number and shape of teeth, and in the way in which they are placed and engaged. But in spite of the fact that this speed is miraculous, even more astounding is a most ingenious lathe that he invented . . . to carve out with a file iron wheels to the required dimension and degree of uniformity of the teeth . . . no wheel was made twice because it always came out right the first time."

(From Daniel J. Boorstein, *The Discoverers*, 1983, Random House, p. 65.)

