# Science

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## Of the Week

244
244
245
245
245
246
246
247
247
248
248
253
253
250
253
243

COVER: Channeled Scablands region of eastern Washington as seen by ERTS-1 satellite. The darker braided patterns in left and right center depict the channelways of a stupendous flood caused by sudden rupture of a natural ice dam 18,000 to 20,000 years ago. Two geologists believe they see evidence for similar occurrences on Mars. See p. 250. (Photo: NASA/U.S. Geological Survey)

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E. G. Sherburne Jr. Kendrick Frazier

255

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# To the Editor

# Inventors and the patent system

Mr. John B. Lewis's comments on the patent system (SN: 9/21/74, p. 179) are sufficiently misdirected to require correction, respectively offered as follows:

1. Most corporations have financial incentive plans which provide significant monetary and other recognition for worthwhile employee-inventions, in addition to the \$1.00 payment for assignment of ownership of patent rights.

2. What Mr. Lewis obviously intended as criticism of the patent system is in fact an argument tending to prove that the system is working as intended. The patent law requires that an invention be useful in order to be patentable, and ordinary prudence requires that an invention be profitably marketable in order to justify an investment in either a patent application or in tooling for production. These requirements are merely common-sense protections for the inventor and his employer, rather than arbitrary barriers to stifle progress.

3. Individual inventors still succeed in obtaining patents and founding new businesses. (Case histories will be provided upon demand.)

> Robert L. Austin Patent lawyer Chicago, Ill.

#### God and the universe

I must disagree with Mr. Thomsen, (SN: 8/24-31/74, p. 123), when, in the course of his rather interesting discussion on the uniqueness of the structure of the universe, he labels as a cop-out route that theory which accounts this uniqueness to Divine Providence. This seems to evidence a biased a priori assumption that there is no God, without looking for evidences, a very unscientific procedure. A friend summed it up nicely when he said, "How courageous of them not to follow the facts where they lead!"

Steve Figard Ithaca, N.Y.

The 'Jupiter effect'

Regarding the "Jupiter Effect" (SN: 9/ 28/74, p. 197), not only was there no significant increase in seismic activity in 1803, the time of the last planetary lineup, but there was also a conspicuous lack of sunspots. The year 1804 was a maximum sunspot year, but according to the Wolf and Wolfer sunspot numbers the yearly mean sunspot numbers for that year was only 47.5; for 1803 it was 43.1 compared to the yearly mean for 1948 (a year in which the planets were scattered around the sun) which was 136.3. Even if it should be proved that sunspots initiate a chain of events which culminate in earthquake activity, the year 1982 should turn out to be no more seismically active than any other.

E. A. March Fairhope, Ala.

# Catastrophe theory

For several years now I have frequently read your publication, mostly someone else's copy. Since I have always been fascinated by both content and form of presentation I finally succumbed to subscribing for my own copy.

Prof. Steen's review article in the Sept. 14 issue on the theory of catastrophes to me is almost worth the whole subscription price. Although rather limited in my mathematical understanding, I sense the enormous importance of this theory and would like to urge you to have someone write a full article on it, including the ramifications into, and implications for the various fields which Zeeman apparently touched on.

Erhard F. Hoegger Wilmington, Del.

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243