

in the wrong places for elements. Mrs. Noddack described their work: "Already in 1871 Mendeleev predicted three of his system's missing places, whose characteristics he derived from their vertical and horizontal neighbors. . . . But it seems that Mendeleev, who had a wonderful imagination, did not dare to predict other empty spaces. . . . Among these few holes it was especially noticeable that there were two directly below manganese. . . . We soon realized that the few textbooks available at that time were not sufficient for our work. . . . We had to work through papers of the original literature of the past 100 years. . . . We realized that in the vertical group of the system there were not only somewhat steady changes, but also jumps, and for analogous reasons, these jumps must take place between manganese and the ekamanganese which lies directly underneath it."

The Noddacks scientifically guessed the charter of elements and then began their hunt for the very rare elements. Because they worked from an ordering principle, their guesses were correct. After many years of work, they published the findings of the two elements: number 43, masurium, and number 72, rhenium.

Something unbelievable then happened: a total denial from the scientific world! How could two young chickens have found the elements that for years had eluded so-called great scientists? The Noddacks decided to look for rhenium in its pure state, and travelled to Norway to collect the mineral. They succeeded, and proved that rhenium is element number 72. Unfortunately, masurium is so rare that they were unable to prove its existence. The element was later produced artificially and given the name technetium.

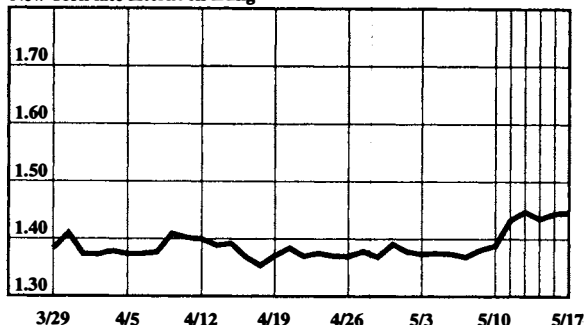
Tennenbaum opens up the world of science and the joy of discovery to those of us who generally think of it as dull, simply a matter of memorizing facts. If I were a science teacher, this book would be the first book the children would read.

Beyond that, there is an urgent political dimension. In Germany, the Green party, which is totally opposed to all advanced technology, especially nuclear energy, is now considered the third-strongest party. Without nuclear power, not only will industrial nations like Germany become impoverished, because energy costs will be so high, but also developing-sector nations will lose whatever chance they would have had to become industrialized. These Greenies, who, in the name of "feminism," are preventing Third World women from developing their nations, have also done horrible things to the youth of Germany. As this author can attest from her recent years' attendance as a student in a German *Gymnasium*, the Green ideology has become predominant among German youth, and has inserted itself as a central component of the German education system. The Greens have taken away young people's ability to be excited about discovering something, as these women scientists did, which can change the lives of people all over the world. This book is a necessary antidote to this Green disease.

Currency Rates

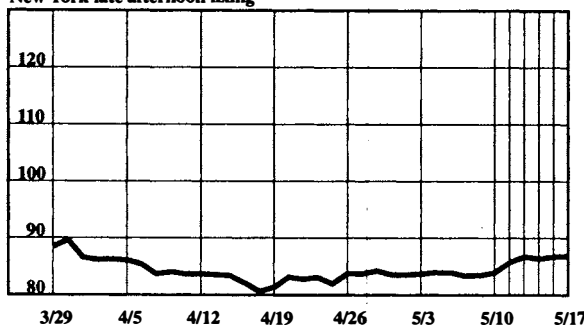
The dollar in deutschemarks

New York late afternoon fixing



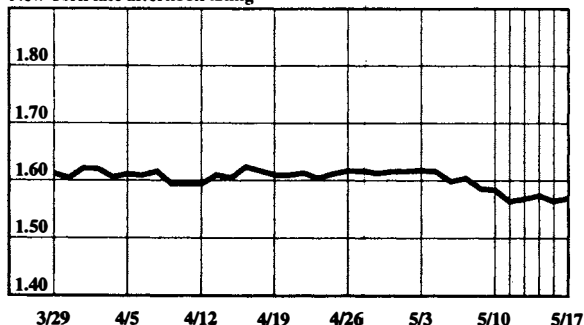
The dollar in yen

New York late afternoon fixing



The British pound in dollars

New York late afternoon fixing



The dollar in Swiss francs

New York late afternoon fixing

