50, 100 & 150 Years Ago

FROM *SCIENTIFIC AMERICAN*

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ELEMENT 101—"We watched with eyes fixed on a pulse recorder connected to the ionization chamber. An hour went by. The night dragged on toward dawn. The waiting seemed interminable. Then it happened! The recorder pen shot up to mid-scale and dropped back, leaving a neat red line which represented a large ionization pulse—10 times larger than would be produced by an alpha particle. No such pulse had been recorded from natural background radiation in test runs conducted for many days prior to the experiment. It looked highly probable that the pulse was indeed a signal of the hoped-for fission. The vigil continued. An hour or so later the pen recorded a second pulse like the first. We were now confident that we had witnessed

the decay of two atoms of element 101—and had added a new member to the roster of chemical elements.— Albert Ghiorso and Glenn T. Seaborg" [*Editors' note: Seaborg had won a Nobel Prize in Chemistry in 1951 for this work.*]

FLEXAGONS—"Mathematics owes a lot to games, and vice versa. There is an engaging little exercise with strips of paper which has fascinated some first-class brains in recent years. It was discovered in an idle moment by a British mathematics student at Princeton University. The whole thing grew out of the trivial circumstance that British and American notebook paper are not the same size.—Martin Gardner" [*Editors' note: This article was Gardner's first of numerous contributions to this magazine, all of which are now available on the CD-ROM "Martin Gardner's Mathematical Games."*]

DECEMBER 1906

FIRS T FLIGHT S —“In all the history of invention there is probably no parallel to the unostentatious manner in which the Wright brothers, of Dayton, Ohio, ushered into the world their epochmaking invention of the first successful aeroplane flying machine. Their success marked such an enormous stride forward in the art of flying, was so completely unheralded, and was so brilliant that doubt as to the truth of the story was freely entertained; especially as the inventors refused either to give access to the machine or to make any statement as to its broad details. The Scientific American, however, wrote to the seventeen eye witnesses who were mentioned as having seen the various flights and received letters from these reputable local residents, which completely set at rest all doubt as to what had been accomplished. Unfortunately, the foreign aeronautical world failed to appreciate the significance of the facts as thus made known; and when Alberto Santos-Dumont made his recent short flight of a few hundred feet he secured in Europe

the credit for having made the first successful flight."

DEEP-SE A PEDES TRIAN—"A novelty in the way of diving apparatus is the invention of M. de Pluvy, a prominent hydrographic engineer of Paris. The suit is built of light and strong sheet metal. The joints and coupling points are made of pressed leather and rubber. The air is not brought to the diver from the outside, as usual, but the air he breathes is sent by a tube into a special regenerating chamber containing certain chemical products which renew the supply of oxygen. M. de Pluvy has personally been able to go down as far as 300 feet with the new diving suit."

DECEMBER 1856

ETHER PROBLEM—"News from Bahia (South America) gives an account of the burning of one of the combined steam and ether ships, named *La France,* in that harbor. The ether could not be kept in the liquid state in that warm climate; it escaped in

great quantities from the tanks
in which it was contained,
caught fire, and burned up the
entire vessel. Ether boils at 96°
Fahrenheit, therefore it was exceedingly
stupid for those who
had charge of that vessel to carry
ether with them into such a
climate, where the water in the
bay often ranges at a temperature
of 100°.”

Synthetic Elements ▪ First-Flight Rights ▪ Fiery Ship

DE PLUV Y DIVING SUIT opens Neptune’s realm, 1906

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