

Beginning in 1883, a project was undertaken to remodel and embellish the church, which was now the central church of the diocese. On September 28, 1884 upon completion of the project and satisfaction of all debt incurred, the new Mother Church of the diocese was consecrated by Archbishop P.J. Ryan of Philadelphia, and its name was changed to the Cathedral of St. Peter marking its new role in the still young diocese comprised of eight counties in northeastern Pennsylvania.

Mr. Speaker, on this 150th anniversary celebration, I would like to congratulate the parishioners of St. Peter's Cathedral. St. Peter's Cathedral, a Scranton landmark that has endured these many years, is a visible example of both the storied history of the City of Scranton and the role the Catholic Church played as an integral part of this community.

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#### EULOGY FOR EDWARD TELLER

### HON. CURT WELDON

OF PENNSYLVANIA

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, September 24, 2003*

Mr. WELDON of Pennsylvania. Mr. Speaker, I rise to honor the memory of Edward Teller, perhaps the most important scientist of the 20th century, who died Tuesday, September 9, 2003, at his home on the campus of Stanford University, at the age of 95.

Edward Teller was born into a prosperous family of Jewish Hungarians in 1908. After attending schools in Budapest, he went to Munich and Leipzig to earn a PhD. in physical chemistry in 1930. His doctoral thesis, on the hydrogen molecular ion, helped lay the foundation for a theory of molecular orbitals that remains widely accepted today.

Teller studied atomic physics under Niels Bohr in Copenhagen in the early 1930s. In 1935, Teller and his bride, Augusta Harkanyi, went to the United States where he taught at George Washington University. Together with his colleague George Gamow, he established new rules for classifying the ways subatomic particles can escape the nucleus during radioactive decay.

In 1941, Teller became a U.S. citizen, and joined Enrico Fermi's team at the University of Chicago in the epochal experiment that produced the first self-sustaining nuclear chain reaction. Teller then accepted an invitation from the University at Berkeley to work on theoretical studies on the atomic bomb with J. Robert Oppenheimer. When Oppenheimer set up the secret Los Alamos Scientific Laboratory in New Mexico in 1943, Teller was among the first recruited.

As early as 1943, Teller conceived the idea for the hydrogen bomb, a weapon potentially thousands of times more powerful than the atomic bomb. Teller's idea for an H-bomb was a decade ahead of his fellow scientists, who were the best and brightest in their field.

After World War II, in 1946, Teller accepted a position with the University of Chicago, while also serving as a consultant to Los Alamos. When the Soviet Union exploded an atomic bomb in 1949—years before they were expected to do so—the Atomic Energy Commission investigated Teller's proposal for developing an H-bomb. Oppenheimer voted against such a program, siding with scientists who

claimed the H-bomb was technologically impossible. The debate was settled by the confession of the British atomic scientist Klaus Fuchs that he had been spying for the Soviet Union since 1942. Fuchs had known of American interest in a hydrogen bomb and passed along U.S. data to the Soviets. In response, President Truman ordered the H-bomb project to proceed.

Teller solved a key problem in designing the H-bomb, proposing that radiation, instead of mechanical shock, could be used to compress and ignite the thermonuclear core. Teller's H-bomb was successfully tested on November 1, 1952. It yielded an explosion of 10 megatons, one thousand times more powerful than the Hiroshima A-bomb.

By the way, on August 12, 1953, the Soviet Union successfully tested their H-bomb, less than one year after Teller's test. So Teller was proven right both about the technical feasibility of the H-bomb, and about the imminent Soviet threat. If Teller had lost his argument with Oppenheimer, the Soviet Union would have beaten the United States to the H-bomb, and the Cold War might have had a very different outcome.

Teller was instrumental in the creation of the United States' second nuclear weapons laboratory, the Lawrence Livermore Laboratory, in 1952. For the next four decades, with Teller often at its head, Lawrence Livermore was the United States' chief laboratory for the design of nuclear weapons.

Throughout his life, Teller served as a prominent government advisor on nuclear weapons, nuclear strategy, and national security issues. In 1982–83, he was a major influence on President Ronald Reagan's proposal to defend the United States from nuclear missile attacks by means of a Strategic Defense Initiative.

In 2003, Edward Teller was awarded the prestigious Presidential Medal of Freedom, the nation's highest civilian honor.

Although no longer with us, Teller will always live through his technological achievements and his political ideals. Edward Teller's scientific vision combined with his patriotism and far-sighted wisdom to create a safer world. Teller's invention of the hydrogen bomb thwarted the Soviet Union from achieving a decisive technological advantage over the United States and probably prevented nuclear war. The H-bomb also deterred the USSR from attempting to enslave the western democracies by invading with its vast preponderance of tanks, soldiers, and aircraft. So Teller's awesome invention prevented the Cold War from turning hot, made possible the long half-century stalemate between East and West, and avoided the Third World War that many, but not Teller, thought inevitable. The Cold War ended with the peaceful triumph of democracy and the emergence between the United States and Russia of friendship. Edward Teller deserves a huge amount of credit for this happy outcome.

Edward Teller also deserves credit for conceiving the idea of missile defense as a way of defeating weapons of mass destruction. As early as 1945, Teller authored a report for the Navy arguing that missile defense against atomic weapons is possible. Teller never stopped thinking about the idea of missile defense. He briefed then Governor Ronald Reagan on the possibility of a national missile defense in 1967. He again promoted the idea

of strategic missile defenses to President Reagan in the early 1980s. Teller's ideas became the basis for Ronald Reagan's Strategic Defense Initiative. SDI has evolved into the reality of a National Missile Defense to protect the United States from weapons of mass destruction launched by rogue states and terrorists.

Critics claim that missile defenses against weapons of mass destruction cannot work. Ironically, back in the 1950s, Teller's liberal critics said the same thing about the hydrogen bomb, claiming the H-bomb would not work. Those critics were wrong then and they are wrong now. Missile defenses are already technologically proven.

The bottom line about Edward Teller is that, had he never lived, millions would probably be dead today, and the Western democracies might not exist. In the future, millions will continue to enjoy the fruits of freedom and security, sheltered by missile defenses, because of the genius of Edward Teller.

I have introduced two bills that honor the memory of Edward Teller by trying to carry on his work. One bill establishes the Teller-Kurchatov Alliance for Peace. The Teller-Kurchatov Alliance will support joint research on peaceful uses of nuclear energy and promote cooperation and friendship between the United States and Russia. The other bill establishes a Commission on Nuclear Strategy of the United States. The Commission will think broadly and deeply, twenty years into the future, about the long-term role of nuclear weapons given the end of the Cold War and the rapidly changing global security environment. The Commission will harness the intellectual power of men like Edward Teller, the leading intellects of that Great Generation that guided the United States safely through the nuclear perils of the Cold War, in order to gain their wisdom and guidance on the safest course to follow in the future.

In closing, on behalf of the U.S. Congress and the American people, we say farewell to Edward Teller, the lion of science. Following his leadership and vision, we must continue to search for scientific answers to the world's most demanding challenges.

We must embrace his calls for greater cooperation with our former adversaries in the Soviet Union. Dr. Teller's life and work make clear that we can solve any problem, overcome any challenge and rise to any occasion for the good of humanity.

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#### EXPRESSING SYMPATHY TO CITIZENS OF EUROPE

### HON. MICHAEL H. MICHAUD

OF MAINE

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, September 24, 2003*

Mr. MICHAUD. Mr. Speaker, I rise today to remember the victims of the heat wave that gripped Europe through the month of August. Record-setting temperatures across the continent resulted in crop-ravaging drought, devastating forest fires and the deaths of thousands.

Cities across Europe from London to Paris to Rome experienced temperatures never before seen in recorded history. A lack of rainfall and soaring heat left crops withered and unusable. The economic costs of such losses have