



**Listerine stops
bad breath
4 times better
than
tooth paste!**

Tooth paste is for your teeth—Listerine is for your breath. Germs in the mouth cause most bad breath, and you need an antiseptic to kill germs.

Always reach for Listerine after you brush your teeth. No tooth paste is antiseptic, so no tooth paste kills germs the way Listerine Antiseptic does . . . on contact, by millions.

Listerine stops bad breath four times better than toothpaste—nothing stops bad breath as effectively as the Listerine way.

Reach for Listerine

... your No. 1 protection
against bad breath

**DRIVE SLOWLY
CAREFULLY
SAFELY**

THE LIFE YOU SAVE
MAY BE YOUR OWN

**WHAT THEY DON'T KNOW
WILL HURT THEM**



**THEY MUST HAVE
FIRST-RATE SCHOOLS**

YOU CAN HELP! Write: Better Schools,
9 East 40th St., N.Y. 16, N.Y.

The Forgotten Father of ROCKETRY

by David M. Warren

Few people realize that
the space age was
launched in 1926 by an
American scientist; here
is the little-known story
of this amazing man.



Goddard demonstrates 1919 "bazooka" (above), and (right) poses with historic liquid-fueled rocket before its 1926 flight. Far right: Roswell launching tower.



Dr. Goddard stands beside one of his early models, a forerunner of all rockets.

ON DEC. 17, 1903, two obscure bicycle manufacturers named Orville and Wilbur Wright launched an airplane over the sandy hills of Kitty Hawk, N. C., and made history.

Some 23 years later, on March 16, 1926, an obscure physics professor named Robert Goddard launched a rocket from a farm near Auburn, Mass., and was almost totally ignored—except for a few neighbors who complained about the noise.

Dr. Goddard is still generally ignored today, although he fathered the age of rockets and missiles just as surely as the Wright brothers pioneered the age of flight.

Rockets, of course, are almost as old as gunpowder but, until Goddard, their use and their performance were haphazard things based on no scientific principle.

A list of the fundamental theories of rocketry, not only worked out on paper, but actually demonstrated, by this mild-mannered teacher is imposing. Many of the basic principles he was the first to suggest and later test are still in use in the most modern missile.

While still in college, Goddard was experimenting with homemade rockets, put together from odds and ends bought in hardware stores. His "captive" tests—chaining the rocket in place and measuring its power—later led to the conclusion that stronger and more reliable fuels than gunpowder (namely liquid fuel) would have to be used.

By 1914 he had been granted two basic patents, one covering the design of the rocket nozzle, by which the exhaust gases could be speeded up, thus producing maximum thrust, and the other covering the fueling system and combustion chamber. With them Goddard suggested the multi-stage principle of placing one rocket on top of another, a principle used in all satellite-launching missiles to date.

Although Goddard was interested in rocket power primarily for peacetime use, notably high-altitude research, he was not unaware of its military potential. On Nov. 10, 1918, he demonstrated a tube-like weapon to Army experts at the Aberdeen Proving Grounds in Maryland. The war ended the next day, and the weapon was forgotten—until World War II. Then, when an improved version was introduced and nicknamed the "bazooka," it was hailed as a bright new weapon. It wasn't; it was Goddard's old creation.

In 1919 Goddard issued a 69-page pamphlet with the modest title, "A Method of Reaching Extreme Altitudes," explaining his work and suggesting that rockets could be used to study the upper atmosphere. It was a sober document, but toward the end he made the mistake of further