

H-BOMB BLAST EFFECT—This model of a four-story building, represented by the four metal frames, is used at Stanford University to test the effects of bomb blasts on construction. The bent steel frames would, in reality, be twisted wreckage. Air-driven pistons can be adjusted by Prof. Lydik S. Jacobsen to represent the blast pressure of different bombs at varying distances from the building.

GENERAL SCIENCE

Predict More Destruction

THE "YET" unforeseeable peaks of destructive power" predicted for atomic bombs of the future by President Truman in his State of the Union message leave even the physicists gasping.

Physicists to whom Science Service has talked, even those who have been close to the A-bomb and H-bomb programs, declare they cannot imagine anything more horrible or with more destructive power than the H-bombs made practicable by the recent Eniwetok experiments.

Yet, one admitted, there is a possibility. "It's fantastic," he said, "but this is what the President might have been talking about—a controllable chain reaction in the atmosphere."

When the H-bomb was first publicized three years ago, some physicists expressed the fear that the fusion process set going in the explosion might spread to the atmosphere around the bomb and keep spreading uncontrollably until all the earth's atmosphere would be destroyed.

If the Atomic Energy Commission physicists have thought of a way to start a chain reaction in the atmosphere with an H-bomb and then stop it again before it spreads too far, this might be one of the future "peaks of destructive power" of which the President wrote.

Some columnists to the contrary, most physicists pooh-pooh fears of spreading

radioactive poisoning with H-bomb explosions. Meteorologists, who know the problems of diffusing materials or particles through the atmosphere, back them up.

There remains the question of whether Stalin actually will be scared by the President's warning of worse things to come than the H-bomb. Some people believe that the H-bomb is probably too big for most targets in the Soviet Union—the targets usually can be destroyed by the smaller A-bombs. Also, Stalin might well be in a position to say to President Truman: "We can give you tit for tat."

Science News Letter, January 17, 1953

GENERAL SCIENCE

Warren Weaver Is President-Elect of AAAS

➤ DR. WARREN WEAVER, director for the division of natural sciences and agriculture of the Rockefeller Foundation, New York, was named the president-elect of the American Association for the Advancement of Science by the members at their annual meeting held in St. Louis.

A mathematician, Dr. Weaver has been director of this division since 1932, when he resigned as chairman of the University of Wisconsin's mathematics department.

Science News Letter, January 17, 1953

ANTHROPOLOGY

Bones of Oldest True Man Discovered

➤ A FRAGMENT of the bones of the most ancient true man so far known has now been cleaned and subjected to scientific study.

This first man, who lived many millions of years ago in Africa, is described in *Nature* (Jan. 3) by Dr. J. T. Robinson, anthropologist of the Transvaal Museum, Pretoria, Africa.

The new bone specimen, classified by Dr. Robinson as *Telanthropus capensis*, consists of a well-preserved portion of the nose with part of the palate intact. The region of bone below the nose has an angle of slope like that of true man and unlike that of any pre-man, and the nose itself is set on the face in human fashion.

The socket for the left canine tooth is intact and is too small for even the smallest of ape-men tooth roots. The palate is deep as it is in humans.

"There seems small doubt," Dr. Robinson concludes, "that *Telanthropus* is a very primitive euhominid (true man)."

"It demonstrates the very close relationship between *australopithecines* (African pre-men) and man, and is almost certainly the oldest euhominid so far known."

These bones of early man were discovered in the Swartkrans site, three-quarters of a mile west of Sterkfontein and about 25 miles northwest of Johannesburg, Africa. The site is Upper Pliocene in age.

Science News Letter, January 17, 1953

EDUCATION

Girls Ready for School Earlier Than Boys Are

➤ LITTLE BOYS should be six months older when they start to school than little girls.

Tests of school children indicate that girls mature that much sooner than boys, Dr. Frank R. Pauly, director of research of the Tulsa, Okla., public schools, told the meeting of the American Association for the Advancement of Science in St. Louis.

In the sixth grade the girls are still ahead. Although two months younger than the boys in the class, they scored six months ahead of the boys on arithmetic and as much as a year and a half ahead on language. It is not until the first year of college that the boys mature enough to catch up with the girls.

If the boys were admitted to school six months later, Dr. Pauly told the meeting, it would not only be better for the boys' schooling, but it would save about 2% on the cost of education over the nation.

There would also be less heartache to boys and their parents due to poor report cards, and fewer boys would drop out of high school because of unsatisfactory work, Dr. Pauly said.

Science News Letter, January 17, 1953