ATOM GUN REALIZES ALCHEMIST'S DREAM

Gold Made From Another Metal, Scientists Claim.

Washington.—An atom gun shooting atomic projectiles at speeds of 15,000 miles per second, with energies of 11,000,000 volts—more than double the power of any atom smashing device yet created by man, and capable of transmuting every element existing in nature—was announced here before the annual meeting of the National Academy of Sciences by Prof. Ernest O. Lawrence and Dr. J. M. Cork, of the University of California.

With this new atomic "Big Bertha," Doctor Lawrence and his co-workers say they have succeeded at last in realizing, on a small scale, the alchemist's dream of creating gold out of another metal. The quantities made, however, Doctor Lawrence remarked, are not of a magnitude to affect the treasury.

The feat was achieved by the bombardment of platinum with water, or rather with the hearts of double-weight hydrogen atoms taken from heavy water, known as deuterons.

New Substances Created.

The California alchemists converted the platinum not only into gold, but created out of it other substances that do not even exist in nature. These include a radioactive form of platinum known as radio-platinum, and radio-irridium, which also is a radioactive element new in nature.

The new atom gun can shoot a stream of deuteron bullets for the first time out into the open air, without the need of any vacuum tube. This stream of atomic bullets, which casts an eerie greenish-blue glow of preternatural aspect, is the most concentrated and most powerful beam of radiation so far produced by science. Placing one's finger in its path for an instant would cause its loss, Doctor Lawrence said, and great precaution must be taken not to come too close to it.

The beam in air has the relatively enormous length of 25 centimeters, about ten inches; the most powerful high voltage X-ray machines have not created a beam even one-fifth of this giant beam's energy even in a vacuum. Professor Lawrence expects to enclose the giant in a vacuum tube jacket, where its power is expected to be much greater.

More Powerful Than Radium.

The 11,000,000 volt bullets, however, were created by Doctor Lawrence not out of heavy water atoms, but out of the hearts of atoms of helium gas, known as alpha particles, which weigh twice as much as the hearts of the heavy water atoms.

The alpha particles, which consist of two protons (cores of ordinary hydrogen atoms) and two neutrons (electrically neutral particles) are naturally emitted by radium, but the energy of the natural particles does not exceed 8,000,000 volts and cannot be controlled in a beam.

Doctor Lawrence's artificially produced alpha particles thus are about one-third more powerful than the neutral radium particles, with the additional advantage that they can be made to go wherever wanted to do man's bidding.

Population in 10 States Drops During Five Years

Washington.—Population shifts that left ten states with fewer residents in 1935 than in 1930, despite a gain of nearly 5,000,000 for the nation as a whole, were reported by the census bureau.

The total population for the United States in 1935 was estimated at 127,621,600 several months ago.

The ten states which registered actual decreases were: Michigan, Wisconsin, South Dakota, Nebraska, Kansas, Montana, New Mexico, Arizona and California.

New York is still the most populous state, with 12,880,000, while Pennsylvania continues to rank second, with 10,066,000.

Among states gaining the most in the first year period were South Carolina, Georgia, Florida and Tennessee.

Memorial for Builder of "Big Bertha" Ordered

Frankfurt-on-Main. — In this time when everywhere tablets are erected for persons once connected with Germany's army, or in commemoration of military events, the burgomaster of Frankfurt has ordered a memorial tablet to be affixed at No. 8 Heister street, where Prof. Friedrich Heinrich Rausenberger, constructor of "Big Bertha," the gun which shelled Paris during the World war, was born. Rausenberger died in 1926.

Find Spanish Coins of 1648 in Oregon

Mohler, Ore.—August Grab dug up 12 Spanish coins on his dairy ranch, all dated around 1648 and stamped with the head of Queen Isabel.

The find revived interest in an Indian legend that a Spanish galleon once was wrecked on the Nehalem coast during a fight with pirates and a fabulous treasure was buried somewhere on Nesh-Kah-Nie mountain.

The mountain is pitted with the diggings of hopeful treasure hunters, but none has found the chest, although several have lost their lives looking for it.

Camels Carry Radios to the Orient

THE most primitive means of transportation is used to carry the instruments of the most modern means of communication to the heart of India. The above photograph depicts a camel caravan conveying a shipment of Philco radios past the river Hub to the State of His Highness the Jam Shaheb of Las Bevis (Baluchistan). This is another example of the way in which the entertainment and education facilities of the civilized world are being brought by radio to the most remote sections of the world. Only recently another Indian potentate, His Exalted Highness the Nizam of Hyderabad, announced his decision to place a radio set in each of the 20,000 villages that constitute his domain, and to construct four modern radio stations that will break down the age-old cultural isolation of his people. Radio also offers the American short-wave listener contact with the most inaccessible quarters of the globe, and brings him understanding of foreign peoples whose customs have remained unchanged since the dawn of history.

Toll of Auto Deaths Fought By Scientific Exhaust Test

Every year the deadly traffic toll reaches new figures for highway deaths. This is the sixth of a series of articles to combat a new common enemy, carbon monoxide gas, more deadly and insidious than any "poison gas" employed in warfare.

By L. T. WHITE
Highway Safety Expert

MILLIONS of Americans recently read an article entitled "And Sudden Death," which painted vividly the horrors of accidents, the inevitable mangling of bodies, the incredible pain of steel crushing flimsy bones.

Doubtless many drivers, as a result of reading that article, checked their brakes and tires carefully, even cut their normal speed 10 to 20 miles an hour. But the most potent friend of death-on-the-road still roams at large in many cars on many highways—carbon monoxide!

The man behind the wheel becomes drowsy—accident!..He gets a headache—he applies his brakes too slowly—accident! He becomes car sick—swerves too suddenly—he's off the road! Maimed victims, even fatalities, all due to carbon monoxide!

For an improperly adjusted motor, plus lack of enough fresh air while driving, allows poisonous gases—odorless, colorless, tasteless—to seep in and attack the driver with frightening speed. Probably a million automobiles on the road today are exposing their drivers to the deadly dangers of sufficient carbon monoxide to make them physically unfit to exercise prompt and proper judgement, particularly in cases of emergency.

Science, fighting this dread enemy of even the most cautious motorists, has devised the Power Prover as an infallible tester of a motor's exhaust gases and consumption efficiency. The elimination of carbon monoxide is readily accomplished when the sources of seepage are exposed.

The day is not far distant when such tests, at periodical intervals, will be part of a compulsory examination of the safety devices of automobiles. Already several eastern states are considering including this new phase of motoring into their laws.

Amelia Tackles New Piloting Job

Amelia Earhart, famed aviatrix, tries her hand on a new kind of piloting—with a "Scooter Kite" auto on the Midway of the Texas Centennial Exposition in Dallas. The badge she wears is that of a constable from "Judge Roy Bean's Court."

7,000-Mile Journey of Newlyweds Covers Desert

Sydney, N. S. W.—A 7,000-mile honeymoon caravan tour of Australia has ended—eight months after the bride and bridegroom set out.

The honeymooners were Mr. and Mrs. Francis Birtles of Sydney, and in the course of their trip they traveled up the Australian east coast, across the north and down the center, through tropical jungle and sandy desert.

Their caravan was fitted with a refrigerator, wireless, a sink with running water, water tanks and a portable bath. It was as heat and fly proof as it was possible to make it.

Eight months' supplies of groceries were taken by the couple when they started from Sydney. With rod and gun they kept themselves supplied with fish and meat.

The bride had to prepare most of her cosmetics herself. She invented a face cream which also proved useful for polishing the car which hauled the caravan.

SPORTS TALK

By "Whitie"

Well, the Perquimans Indians will open their football campaign playing Aulander, at Aulander, this Friday. This will be the first game that the Indians have played outside of practice, during scrimmage. Last year the game between the Perquimans boys and the Aulander eleven ended in a 13-13 tie.

The Aulander eleven will probably play a return game here on the local field later on in the season.

As a whole, the Perquimans boys look lots better this year than the teams have for the past few years. The team is in good condition and is working into fine shape. The Indians are in high hopes of taking the game from Aulander on Friday.

In the back field this year we find Don Nixon, a veteran of last year, who will hold down the quarterback position on the Indian eleven this season. Don has been doing some nice kicking and passing during practice. He will also be called on to carry the pigskin lots this season.

Rex Gould, a new comer to the squad, will be a big help to the team this year. He is taking care of the half back position, and boy! is he fast? This boy is going to be plenty hard to stop. The other halfback will probably be Zack Harris. The fullback post will be filled by Campen or Reed.

The linemen will be picked from the following: Winslow, Sumner and White, of last year's squad, tnd Broughton, Tucker, Wat Winslow, Ward Elliott and Thach.

Saturday is the day when Duke meets its first big rival, Colgate, at the Duke stadium.

Wonder what Parker will do against the tricky eleven from Colgate. This team will have plenty of trick plays. "Andy Herr and his Magicians" is the name often applied to the boys from Colgate.

Claude Brinn, who graduated from Perquimans in '35, is slated for a back field position at Louisburg this year. Henry Stokes, of the class of '36, is out for center on the Louisburg team.

Rob Morris, of Hertford, and Al Ward, a new resident here, are playing on the Fork Union team this year, Morris taking care of a line spot and Ward holding down one of the end positions.

What will the girls' basketball team of P. C. H. S. do without the services of Nancy Woods, who turned out championship teams for several years for Perquimans, and who did not return this year?