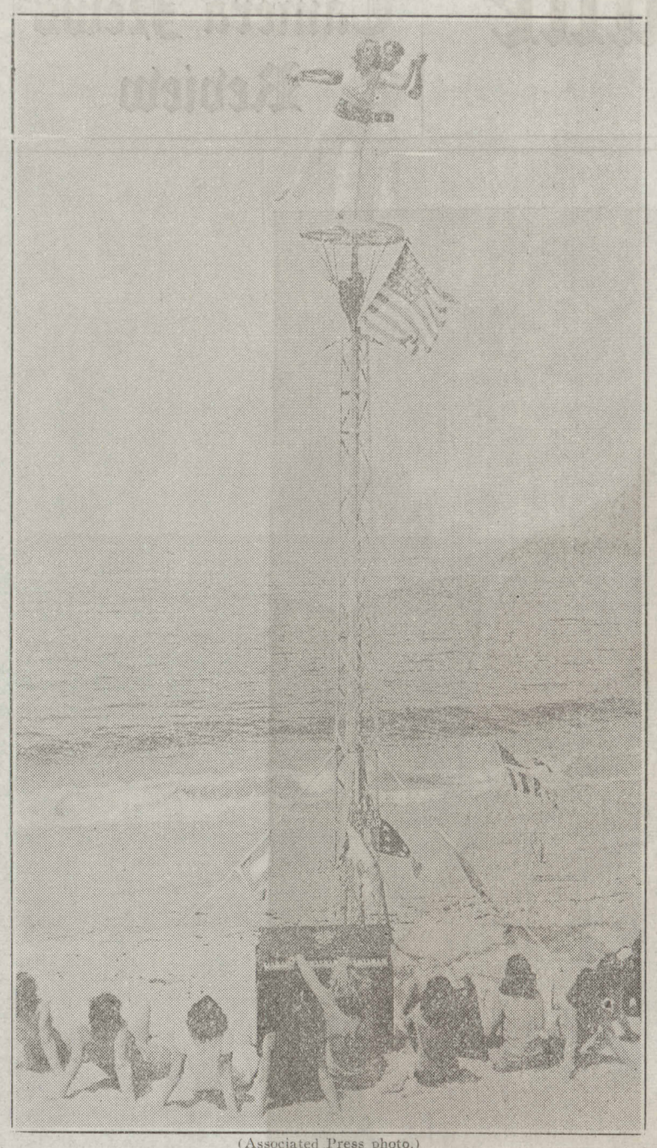
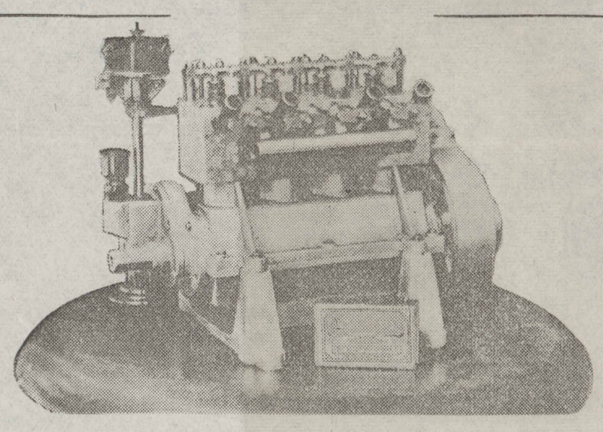
Beach High Steppers



(Associated Press photo.)

ON THE beach at Venice, Cal., the natives spend their time thinking up novelties to snare publicity. At least that is the impression one receives from the numerous stunt pictures, such as this one, which emanate from the southern California resort. In this picture we see a youthful couple marathon-dancing on a platform 50 feet high.

Midget Motor That Works

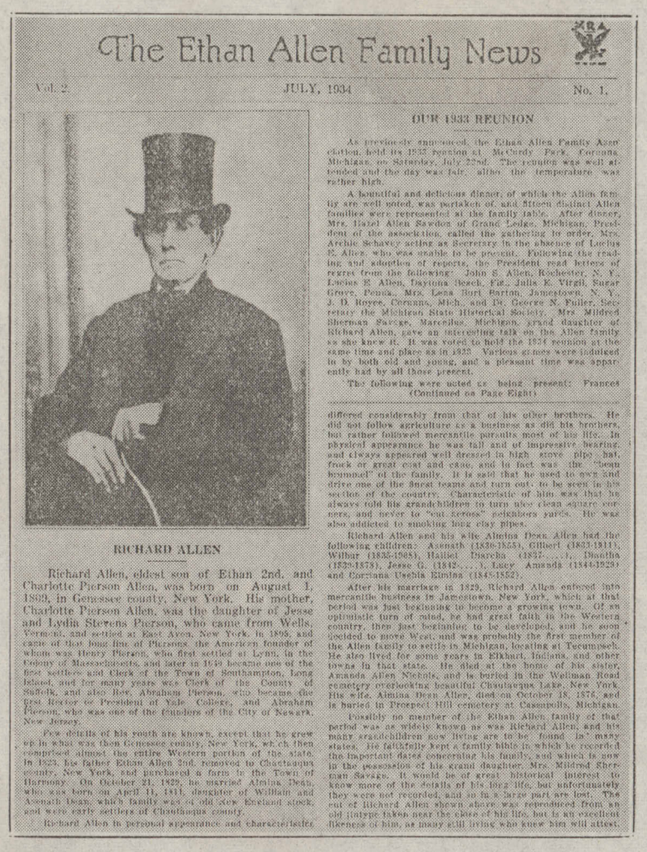


ONE of the smallest working model gasoline engines ever designed is this motor, built by Elmer Wall of Chicago. It is a four cylinder motor with one inch bore and one inch stroke. It develops one horsepower at 6,000 revolutions per minute. The motor weighs 7½ pounds and has a total displacement of 3.05 cubic inches.

Bicycle Day at Fair

BICYCLE day was a recent feature at the World's Fair in Chicago. On that day anyone who rode a bike to the gates of the exposition was admitted free. This picture shows two small girls on modern wheels beside a young man who rode in on an oldtime wheel, such as those popular in the '80's. Dozens of cyclists competed in races and fancy riding events during the day.

Strictly a Family Paper



The Ethan Allen Family News

Vol. 2 JULY, 1934 No. 1.

OUR 1933 REUNION

As previously announced, the Ethan Allen Family Association held its 1933 reunion at McCurdy Park, Corunna, Michigan, on Saturday, July 22nd. The reunion was well attended and the day was fair, while the temperature was rather high.

A bountiful and delicious dinner, of which the Allen family are well noted, was partaken of, and fifteen distinct Allen families were represented at the family table. After dinner, Mrs. Hazel Allen Savidon of Grand Ledge, Michigan, President of the association, called the gathering to order, Mrs. Archie Schavey acting as Secretary in the absence of Lucius E. Allen, who was unable to be present. Following the reading and adoption of reports, the President read letters of regret from the following: John S. Allen, Rochester, N. Y.; Lucius E. Allen, Daytona Beach, Fla.; Julia E. Virgil, Sugar Grove, Penna., Mrs. Lena Bort Sartan, Jamestown, N. Y.; J. D. Royce, Ortonna, Mich., and Dr. George N. Fuller, Secretary the Michigan State Historical Society. Mrs. Mildred Sherman Savage, Marcellus, Michigan, grand daughter of Richard Allen, gave an interesting talk on the Allen family as she knew it. It was voted to hold the 1934 reunion on the same time and place as in 1933. Various games were indulged in by both old and young, and a pleasant time was apparently had by all those present.

The following were noted as being present: Frances

(Continued on Page Eight)

RICHARD ALLEN

Richard Allen, eldest son of Ethan 2nd, and Charlotte Pierson Allen, was born on August 1, 1809, in Genessee county, New York. His mother, Charlotte Pierson Allen, was the daughter of Jesse and Lydia Sterens Pierson, who came from Wells, Vermont, and settled at East Avon, New York, in 1809, and came of that long line of Piersons, the American founder of whom was Henry Pierson, who first settled at Lynn, in the Colony of Massachusetts, and later in 1640 became one of the first settlers and Clerk of the Town of Southampton, Long Island, and for many years was Clerk of the County of Suffolk, and also Rev. Abraham Pierson, who became the first Rector or President of Yale College, and Abraham Pierson, who was one of the founders of the City of Newark, New Jersey.

Few details of his youth are known, except that he grew up in what was then Genessee county, New York, which then comprised almost the entire Western portion of the state. In 1823, his father Ethan Allen 2nd, removed to Chautauqua county, New York, and purchased a farm in the Town of Harmony. On October 23, 1829, he married Almira Dean, who was born on April 11, 1811, daughter of William and Asenath Dean, which family was of old stock England stock, and were early settlers of Chautauqua county.

Richard Allen in personal appearance and characteristics

REFLECTING the traditions and history of a family which has remained almost 100 per cent pure American stock over many generations is the Ethan Allen Family News, probably the only strictly family newspaper in the country. The paper, edited by Lucius E. Allen of Detroit, has a circulation of 500. The journal is devoted exclusively to news and history of the Allen family.

Science Hunts Effects of Mysterious Cosmic Ray

By C. Robert Moulton

COSMIC rays have "made" the daily paper. Yet the source and significance of these rays are not known to any of the many scientists who are making special studies of them. The rays belong to the group of electromagnetic radiations, the fundamental character of which, physicists tell us, is not understood. Yet any person who is not blind feels quite at home with that part of the radiations which is called light and knows something about two other parts known as radio waves and X-rays.

Some of the properties of waves are known to all of us who have stood on the shore of a body of water agitated by the wind or have seen the ever-widening rings of wavelets that proceed outward from the spot where a stone is dropped into still water. In the latter case, as well as when waves are seen far enough from shore so that they do not break, the particles of water one is looking at go through motions which make a wave, but do not travel along with the wave. Part of the time they are moving at right angles to the direction of the progression of the wave and part of the time in the direction of progression. The result is a circular motion which gives a wave, a rather complex type of wave.

A simple type of wave motion of the first kind is seen when one grasps one end of a rope, the other end of which is fastened to a post or other immovable object, and moves the free end up and down by means of the hand. When this is done properly a succession of waves moves from the hand toward the post. Yet the rope does not travel in that direction. Its particles simply move up and down. Sound furnishes an example of wave motion of the second kind. In this case, when air is the medium through which the sound is transmitted, the particles of air move forward and backward in the direction of movement of the sound, giving an oscillation or wave of the second type.

Sound is transmitted by matter and will not pass through a vacuum. Light, in common with all other radiations, does not need matter for its transmission. It passes through a vacuum. It goes in waves something like those made by the rope, but vibrating in all planes at once. These waves have electromagnetic properties. They differ in length, or distance from one crest to the next crest, but they all travel with the same speed, which is that of light, about 186,000 miles a second.

Among the longest of radiation waves are those of wireless telegraphy, which range from 15 miles down to one-fourth of a mile in length. Wireless telephony waves vary from one-fourth of a mile to 120 feet long. Above these two are the long electromagnetic waves, which run up to hundreds of miles in length; and below these two are the short electromagnetic waves, which run from 120 feet down to one one-hundredth inch long.

The next shortest radiations are called heat waves. Some of these may be felt by a person standing in front of an open grate fire or near a red-hot stove. Heat waves vary from one one-hundredth inch in length down to 28 millionths of an inch. Since these fractions are so small, the physicist now has to use a smaller unit of length called the Angstrom unit (A.U.). Twenty-eight millionths of an inch is equivalent to 7,000 A.U.

The next range of waves, from 7,000 to 3,500 A.U., constitute what we know and see as light, the red rays being at the long end and the violet rays at the short end. Ultra-violet rays run from 3,500 A.U. down to 130 A.U. We cannot see ultra-violet or infra-red rays, on the lower and upper sides respectively of the rainbow of visible light, but properly sensitized photographic plates can "see" part way into both fields.

Ultra-violet rays are more penetrating than light rays, although the earth's atmosphere cuts off much of them. Sunburn is due to the ultra-violet rays. X-rays are much shorter; some of them are a million times shorter than certain heat rays. The penetrating power of X-rays is well known. By their use one can photograph the bones of a person through the covering of flesh and clothing. Still shorter and more penetrating are the gamma rays, which are produced by radium and which give that substance part of its power in the treatment of certain diseases. The shortest of all are the cosmic rays.

The reader may well guess that cosmic rays are the most penetrating of all forms of radiations. Light rays may be cut off by a little bit of black cloth or black paper. X-rays will pass through these and even much denser materials. Gamma rays will penetrate through metal; so radium must be carried in a case made of lead if one is not to be exposed to those rays when handling it. When Dr. Robert A. Millikan of the California Institute of Technology wished to study cosmic rays he submerged the delicate instrument used to detect them beneath about twenty feet of water in a mountain lake. This was necessary in order to cut off rays that would interfere. If one wishes to study the presence of these rays in the atmosphere on mountain tops or at sea level, the electroscope must be buried deep in a mass of lead, which with other parts of the instrument weighs a total of one and one-half tons, as in the cosmic ray meter recently designed by Dr. Arthur H. Compton of the University of Chicago. Dr. Compton is one of several scientists interested in getting more information about the mysterious, penetrating cosmic rays.

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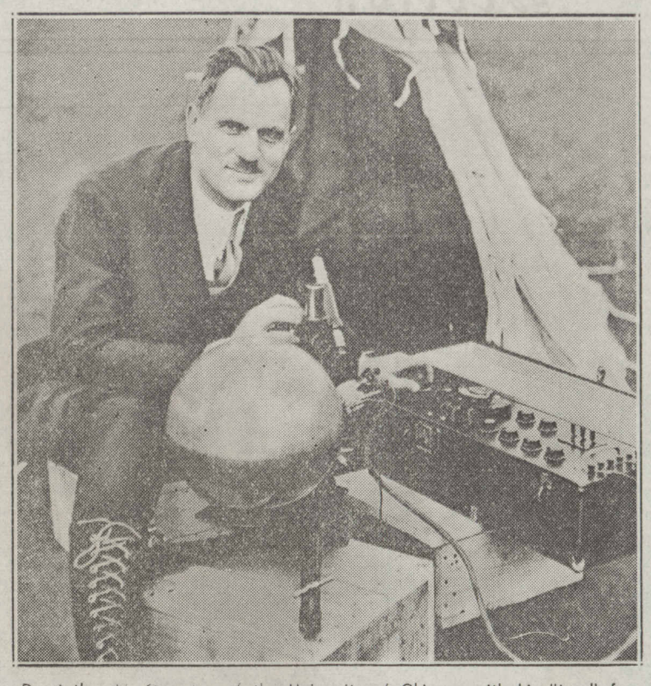
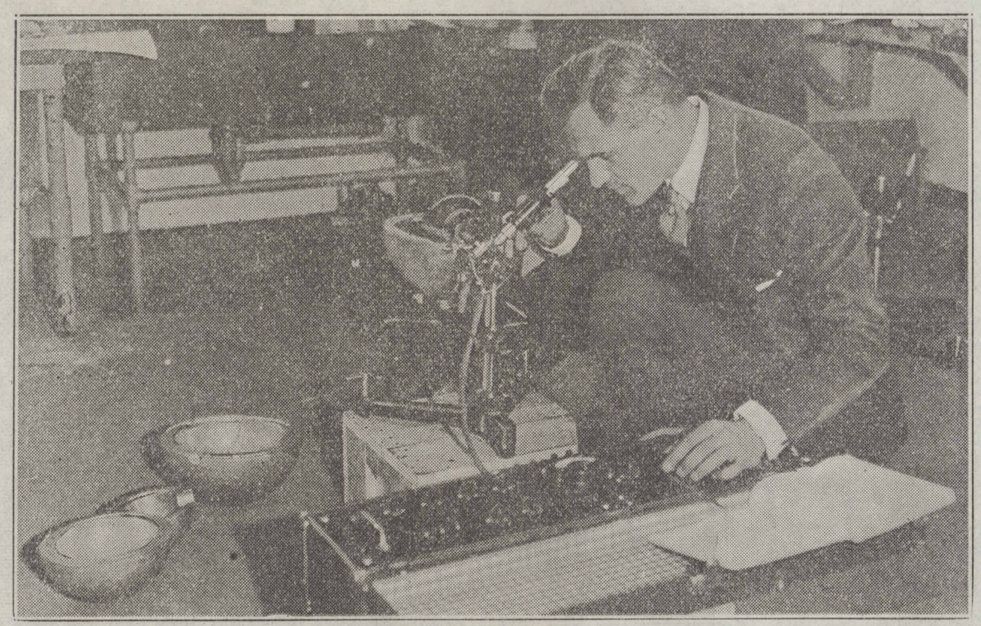
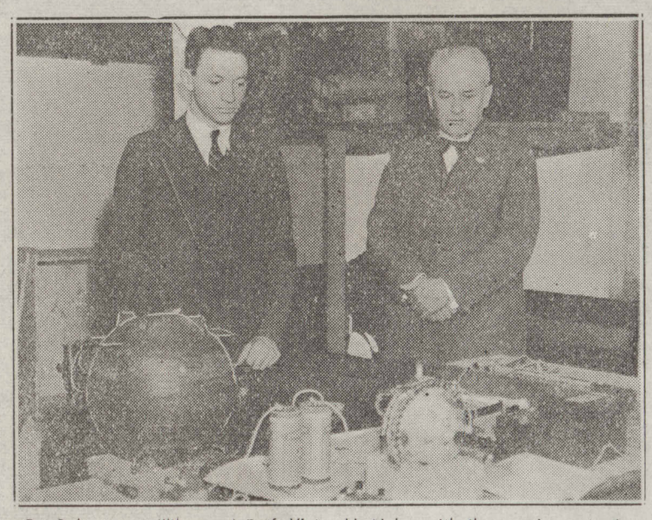


Dr. Arthur H. Compton of the University of Chicago with his "trap" for detection of cosmic rays.



Dr. Compton's meter with the parts exposed to view. The electroscope is shielded by a thick shell of lead; the weight of the entire instrument attains the surprising figure of a ton and a half.



Dr. Robert A. Millikan and Prof. Victor H. Neher with the cosmic ray meter in development of which they collaborated.

A Crash Caused by a Necktie

THIS aerial photograph shows the rescue of Pilot James C. Welch recently from the Hudson river, into which he had plunged in a high wing monoplane. The accident probably was the first ever caused by a necktie. Welch told his rescuers that as he approached the river a gust of wind caught his necktie and flipped it against his face, temporarily blinding him. At the time he was piloting the plane in a race. Losing control of the ship, Welch had no hope of making a safe landing. Hundreds of persons saw the plane dive into the river, and several small boats immediately came alongside of the sinking monoplane, which was towed ashore. Welsh was unhurt, but the plane was wrecked.