

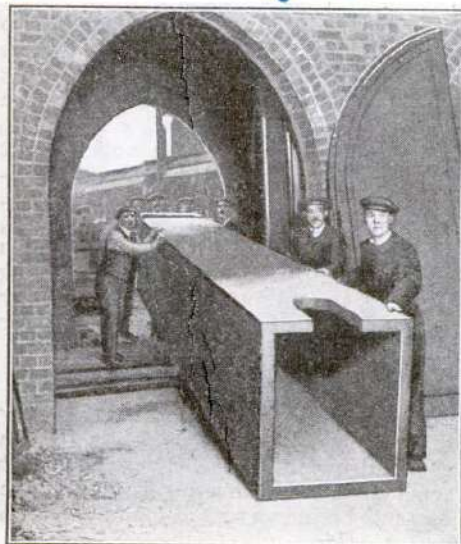
### Thirty-Year-Old Engine Holds Speed Record

OLD "999," queen of locomotives and holder of the world's speed record for her kind, had her moment of glory recently at the railroad exposition in Grand Central Terminal, New York City. A. H. Smith, once her proud engineer, now president of the New York Central lines, is shown above at her throttle.

The old speed queen was placed in service in 1898, 31 years ago. For years she pulled the Empire State Limited, the fastest New York Central train, exactly on schedule. One day she was given full steam and a wide-open throttle. She responded with 112½ miles an hour, a record. It has stood since then. She was retired some years ago.

### Giant Organ Pipe Weighs More than a Ton

AN ORGAN pipe weighing more than a ton was installed recently in the instrument being built in Liverpool Cathedral, England. The pipe is 33 feet long and three feet in diameter. The completed instrument will be one of the largest in the country.



Workmen moving the giant organ pipe

### Recent Publications

A résumé of new books on science and invention

*Wireless of Today*, by Charles R. Gibson, F.R.S.E., and W. B. Cole, A.M., I.E.E. A non-technical explanation of the principles upon which wireless works and a description of the growth of wireless telephony and telegraphy from their inception until today. Illustrated. J. B. Lippincott & Co.

*Personality of Plants*, by Royal Dixon and Franklyn E. Fitch. A popular botanical work, describing the wonders of the plant world in terms that express an analogy in human activities. Illustrated. Boullion-Biggs.

*Everyone's Book of the Weather*, by A. Francon Williams. A concise guide for the amateur weather prophet. Illustrated. The Macmillan Company.

*Weather Proverbs and Paradoxes*, by William J. Humphreys, Ph.D., of the United States Weather Bureau. Ingenious application of the well-known weather adages and saws to scientific forecasting. Illustrated. Williams & Wilkins Company.

*Henley's 222 Radio Circuit Designs*. Written and edited by a large staff of radio experts. A handbook for the radio experimenter. Illustrated. Henley Publishing Company.

*Science and Human Affairs*, by Winter-ton C. Curtis, professor of zoology, University of Missouri. A comprehensive exposition of the humanistic aspects of the natural sciences. Illustrated. Harcourt, Brace & Co.

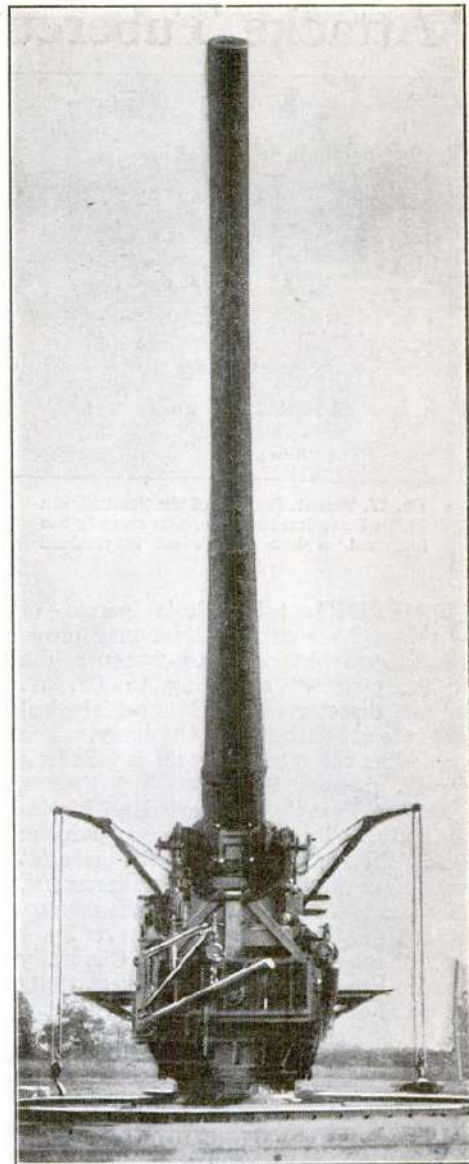
*The Atom and the Bohr Theory of Its Structure*, by H. A. Kramers, University of Copenhagen, and Helge Holst, Royal Technical College of Copenhagen, with a foreword by Sir Ernest Rutherford. Illustrated. Gyldendal (London).

### Famous Pianist Invents Recording Mechanism



A VEIN of inventive genius accompanies the artistic talent of Josef Hofmann, the noted pianist. This genius he has directed successfully at the problem of recording music on reproduction rolls.

The invention with which he is pictured above records the delicate touch of a pianist's fingers with such unerring fidelity that, it is said, no hand corrections on the master roll are necessary. Such hand corrections always have been costly, sometimes almost prohibitively so, and always have fallen short of precise faithfulness to the original.



### Uncle Sam's Greatest Gun Shoots 23 Miles

A MONSTER cannon, capable of hurling a 1560-pound projectile 23 miles, has been developed by the U. S. Ordnance Department. The famous Krupp gun that bombarded Paris during the Great War fired farther, but its missiles were much smaller.

Moreover, the new American gun, 14 inches and of 50 caliber, can be mounted on railway carriages. This mobility makes it far more deadly for most practical military purposes.

The great gun is shown elevated at an angle of 50 degrees. High elevations are necessary in firing such weapons because the trajectory of a projectile is an arc, whose center is high.

### Red Men Prefer Red Color

THE red man's fondness for color is well known, but it has remained for Dr. T. R. Garth, of the University of Denver, to ascertain scientifically the color preferences of Indians in the Southwest.

Full-blood Indians prefer red to all other colors, then blue, violet, yellow, and white in the order named. White men, living in the same social and educational environment, preferred blue, then green, and then red.