

GENERAL SCIENCE

Depression Does Not Justify Research Work Moratorium

THE SAFETY of humanity does not require a moratorium on increase of honest knowledge, Dr. John C. Merriam, president of the Carnegie Institution of Washington, has declared in his annual report, which summarized the accomplishments of hundreds of scientists working under the sponsorship of this far-flung research organization.

While admitting that half truths and unorganized or unrelated facts constitute a real source of danger, Dr. Merriam said that "what we need is more truth and the acceptance of knowledge for precisely what it is."

Scientific research can aid in the present emergency of a depression, Dr. Merriam contended, by continued seeking for new truths. Dr. Merriam recalled the service of science to the World War.

"In each period of emergency there has been intensive study of the place and function of research with reference to needs of the special situation," Dr. Merriam said. "There has been vigorous search for new materials with which to meet the requirements. But in spite of earnest endeavor, it has rarely been possible to secure aid through new research. The major achievements have been reached commonly by inventive use of existing materials through recombinations. These situations, however, exert large influence in stimulation of research. They serve to show that, with a considerable spread of years between the inception of a new and fundamental idea and its human application, there must be continuous study of those more clearly basic things upon which future science and its application will rest."

That heterogeneous, unorganized new ideas may be dangerous to society, Dr. Merriam admitted, in recalling that some have feared that new knowledge will confuse or that in some way research is responsible for maladjustment in the rapid development of heavily mechanized modern life. Newly discovered types of physical energy applied inexpertly in medical practice or unwise economic promotion in connection with introduction of new mechanical devices may be dangerous. Harm can be done through unwarranted philosophical or

religious application of incomplete scientific hypotheses.

But, said Dr. Merriam, the evils which develop are not necessarily to be charged against the new knowledge as such. Generally they are compounded from inadequacy of knowledge or failure to recognize the need of additional correlated information. Human frailty taking the form of selfishness in use of new materials is a menace coordinate in significance with the dangers of ignorance and bad judgment.

"As we see close at hand the end of man's age-long struggle with the wilderness of nature through which he has come," Dr. Merriam said, "it is important to realize that life in those jungles which arise by human construction requires not less, but more, of the type of ability that has characterized human progress to the present stage."

Science News Letter, December 19, 1931

ARCHAEOLOGY

Drawing Shows Man Rode Horse 5000 Years Ago

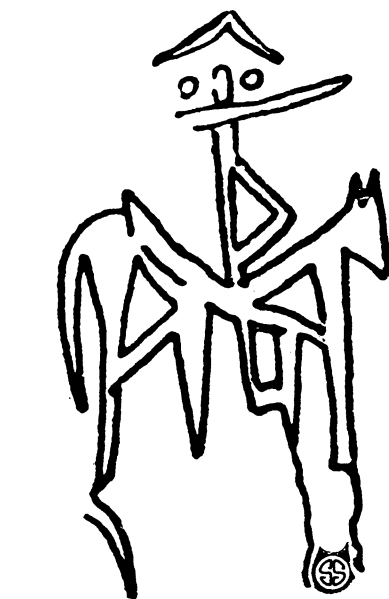
MEN rode horses in the land that is now Persia more than 5,000 years ago, according to archaeological evidence recently unearthed at Susa, capital of ancient Elam and perhaps the oldest city on earth.

ACOUSTICS

Standing Audience Improves Building Acoustics One-Fourth

IF THEATER audiences would stand instead of keeping their seats they would probably be able to hear much better than they do now because the very act of standing often improves the acoustics of an auditorium. This fact was demonstrated recently in a concert given by the Philadelphia Symphony Orchestra, Sidney K. Wolf, an engineer of New York City, said in a recent lecture at Yale University.

Prior to the concert the auditorium



NAPOLEON'S FOREBEAR

The world's oldest known picture of a man on horseback.

The evidence consists of two sketchy outline drawings of men mounted on horses scratched into bone implements found deep beneath the ruins of Susa, below a stratum of culture remains that have been dated with some confidence as of about 3100 B. C., and therefore older than this layer. The implements were described by P re V. Scheil, of Paris, in the *Revue d'Assyriologie*.

Commenting on these crude little sketches, the editor of the English archaeological journal *Antiquity*, remarks: "The great cultural importance of this discovery will at once be apparent; it is the earliest evidence of the domestication of the horse."

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was tested for its acoustical efficiency. During the intermission the audience was asked to stand and again the auditorium was tested. It was found, according to Mr. Wolf, that the acoustic efficiency had improved 25 per cent.

A new type of auditorium has been devised, Mr. Wolf stated, to give the same audibility at the back of the hall and in higher balconies as is obtained in the first few rows.

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