thick. The amplifier used to "step up" the tiny electrical current generated at the junction of the two dissimilar strips of metal by the heat of sound, is capable of responding to one one-hundred-millionth of a volt.

The thin metal strips or films are so delicate that they do not disturb the sound field they are measuring as do other devices. The sound thermocouple with its amplifier is about 100 times more sensitive than previous couples. It is capable not only of recording the minute variations in temperature produced by sound waves but of recording these variations when they are occurring thousands of times each second.

Already the new device has been used to measure the adiabatic heat produced in a sound field up to frequencies of 10,000 cycles a second, and its range can be extended to 300,000 cycles.

The delicacy of the thermocouple makes it an excellent instrument for measuring sound which the ear can not hear, and it is adapted also for light measurements.

Science News Letter, October 6, 1934

ARCHAEOLOGY

Urges Museum Purchase Of Indian Collection

OPE that the vast Payne collection of Indian relics will be acquired by some educational institution or museum, so that its features of scientific value may be preserved, is expressed by Dr. Warren K. Moorehead, well-known archaeologist of Phillips Academy at Andover, Mass.

The collection, left by the late Edward W. Payne, of Springfield, Ill., is famous because it is so enormous that only three or four museums outrank it in numbers of Indian antiquities.

Dr. Moorehead and several other archaeologists are planning to examine portions of the collection, he stated. Dr. Don Dickson of Lewistown, Ill., has charge of the collection.

From previous examination of portions of the huge array of pipes, blankets, and other articles at various times, Dr. Moorehead has estimated that there are at least half a million objects from the Mississippi Basin alone.

Since the death of Mr. Payne, in 1932, the fate of the collection has hung in the balance, and archaeologists have hoped that its features of scientific importance would not be lost by indiscriminate scattered sale.

Science News Letter, October 6, 1934

GENERAL SCIENCE

Editor of British Journal Urges Science Service There

Significance of Scientific Discoveries in Daily Life Should be Pointed Out by Competent Writers

STRONG plea for cooperation bebetween science and the press in Great Britain along the lines of Science Service in America was voiced by Sir Richard Gregory, Bart., editor of the British science journal, *Nature*, in his presidential address before the Association of Special Libraries and Information Bureaux.

Stating that "most admirable work for science publicity has been carried on in the United States since 1921 by Science Service," Sir Richard said that "it would be to the advantage of science and the newspaper press if similar organizations for science publicity were established in other countries and cooperated with one another in an international science agency."

'Art and letters, music and religion, have their interpreters in the periodical Press and cannot complain of any lack of attention to their works or teaching," Sir Richard said. "In its human interests, science can make just as wide an appeal as any of these, but there are few who can review scientific matters with the independent and critical mind which estimates the value of opinion or performances in other spheres. A bare announcement of a scientific discovery may be worth publication as an item of news, but not much more so than a report that an important creative work has been completed by an eminent artist or man of letters. Supplementary to such news, reasons must be given why the discovery or work is of particular significance; which means that its characteristics must be clearly described by a competent writer."

Duty of the Press

"It is surely the duty of the Press," Sir Richard declared in his concluding remarks, "as a service of public utility and the man of science as a citizen as well as a discoverer, to affect a rapprochement in order to create a public opinion which will ensure that no advantage may be lost which might accrue from the application of the results of scientific research to the needs and

amenities of daily life. A more intelligent and more intelligible consideration of scientific work and thought is desirable in the public Press because of their close contacts with many national and international problems. Under the conditions of modern civilization, the community in general is dependent upon science for its continued progress and prosperity. Under the influence of modern scientific discoveries and their applications, not only in industry, but also in many other directions, the whole basis of society is rapidly becoming scientific; and to an increasing extent, the problems which confront the national administration involve factors which will require scientific knowledge for their solution.

Service to Science and Public

"It is in these directions that the Press can render the greatest service to science and the public at the same time. Under the present social and educational system, it is not possible to hope that at any very early date our schools will turn out a population of scientifically-trained men and women. But it is becoming recognized, though slowly too, that what is needed is not so much detailed or expert knowledge of science, as the scientific outlook. The function of the Press, more readily to be appreciated perhaps when something of this scientific spirit has been inculcated in the schools, might very well be, by fostering this outlook, to ensure that the problems of government and administration of society and of economics, are approached with scientific understanding.

Science News Letter, October 6, 1934

Spruce wood from the Northwest coast may well equal European woods for violin making, if carefully selected and seasoned.

That there were camels in Egypt as far back as the Old Kingdom, over 1600 years before Christ, is shown by camel's hair cord from that time.