was named after his wife. There were two other boats, the *Nellie Powell,* named after Mrs. Thompson, and the *Cañonita.*

THE Bureau of Ethnology has received the first report of the field activities of the party undertaking archeological reconnaissance in the eastern section of Honduras, made up of Dr. W. D. Strong, of the bureau staff, Alan W. Payne, and Norman Haskell. The report states that on February 10 the party left Puerto Castilla, proceeded to the mouth of the Patuca River, and went upstream. Studies were undertaken on the Guampu and Cuyamel Rivers, tributary to the Patuca. Two archeological sites marked by the presence of earth mounds were studied and excavated. The few remaining Sumu Indians were encountered, and a brief study was made of them. The conclusion was reached that the Maya culture did not extend that far to the eastward, as nothing indicative of this culture was found. The party learned that several hundred Sumus had been living on the river until four years ago, when an epidemic of smallpox swept them away. The next trip to be made will be from the westward of the Patuca Valley overland *via* muleback into the mountain region.

DISCUSSION

A CIVILIZATION WITHOUT NATIVE MATHEMATICS

IN a recent number of the historical periodical entitled "Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik," volume 2 (1932), page 255, there appears an article by P. L. van Hee, in which it is stated that if the Chinese mathematical books of every epoch would disappear science would suffer no loss as regards mathematics. It is claimed here that China has contributed nothing towards raising the edifice of modern mathematics, but that the mathematics which appears now in the Chinese literature is due to other nations and was often credited by Chinese writers to natives of their own country. Among the recent writers who are said to have been misled by these false claims is Y. Mikami, whose work entitled "The Development of Mathematics in China and Japan," 1913, is widely known and has been frequently referred to as an authority.

There is a remarkable contrast between the recent historical developments relating to China and those relating to Egypt and Babylonia. In the former case these developments seem to tend to show that their early mathematical attainments were overestimated, while in the latter they were underestimated, especially as regards Babylonia. In particular, the issue of the periodical noted above contains also the remarkable announcement that the ancient Babylonians had a rule equivalent to a general formula for the sum of the squares of the first n natural numbers. It was formerly supposed that the first discovery of such a rule was due to the ancient Greek mathematicians. A few years ago it was announced that the ancient Egyptians had a rule which is equivalent to our modern formula for the area of a sphere, but this seems now to be incorrect, having been due to a mistranslation.

The chief interest in the article to which we referred at the beginning of this note is due to the fact that it exhibits a lack of mathematical initiative on the part of the Chinese extending over a long period of time. When mathematics was introduced from other countries it received considerable attention and some of it was permanently retained, but no definite evidences of native advances seem as yet to have been established. The exaggerated claims made by some of the Chinese writers have really been harmful to the reputation of their country and they have made it difficult to form a correct judgment as regards their possible contributions It seems clear, however, that from the standpoint of mathematics ancient China was far behind ancient Egypt and ancient Babylonia. Their ancient as well as their modern civilization exhibits unusual mathematical weakness and many of the references to their achievements along this line are untrustworthy according to some of the most recent investigations.

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THEORIES OF CORTICO-ADRENAL FUNCTION

WITHIN the past year three theories of cortico-adrenal function have been advanced. They postulate that the adrenal cortex (1) prepotently regulates carbohydrate metabolism,[1] (2) produces a general tissue hormone,[2] (3) controls the circulating blood volume.[3] The first appeared about a year ago, the second shortly after, and the third in January of this year.

In presenting their theory of blood-volume regulation and the relation of the adrenals to shock, Swingle and his associates ride rough-shod over other hypotheses. "None," they state, "have materially advanced (*sic*) the problem of cortical function." Not even a foot-line was given to bibliographic mention of the earlier theories mentioned above.

It is not *in justitia scientiae* merely that mention should be made of the praiseworthy contributions of

[1] S. W. Britton and H. Silvette, *Amer. Jour. Physiol.,* 100: 701, 1932.

[2] F. A. Hartman, K. A. Brownell and J. E. Lockwood, *Endocrinology,* 16: 521, 1932; *Amer. Jour. Physiol.,* 101: 50, 1932.

[3] W. W. Swingle, *et al.,* SCIENCE, 77: 58, 1933.