criticism, when the special aim of the publication and the space available are considered. It is not so much the subject-matter contained in the new magazine, or the dress in which it appears, however, as the future of the enterprise and the demands of geography in America that suggest remarks.

If the teachers in our schools will support a magazine devoted to the pedagogical phases of geography there is certainly a broad field open to Professor Dodge and his able associates, but unless the new magazine has such financial support as to be practically independent of the returns received from subscribers, one can scarcely expect it to be long-lived. Other geographical magazines have germinated in this country, blossomed for a short period and, for want of financial support, died or passed to a condition of 'innocuous desuetude.' There is nothing in the appearance or character of the new effort to indicate that it possesses greater vitality than its predecessors.

In addition to the geographic magazines referred to, at least six of the geographical societies of the United States are engaged in publishing magazines and journals. None of these publications are widely known or are exerting an important influence on the development of geography. None of them can be said to have a high standard or to make a near approach to what may reasonably be considered as an ideal geographical magazine.

Instead of welcoming an addition to the number of but little known and far from successful publications already existing, with which the *Journal of School Geography* claims a place, it is for many reasons rather to be wished that the number might be materially decreased and the survivors strengthened.

If our several geographical societies could be induced to put aside what are considered local interests and unite in issuing a single, strong, well-edited and attractively-illustrated monthly magazine, in which the proceedings of the several societies could be reported and the best papers read at the local meetings be published, a great gain would certainly result. Such a plan would do away with duplication in the printing of reviews, current notes, etc., and furnish the members of the affiliating societies with a wider range of reading matter, probably with a decrease in expense, than is afforded by the present system of multiple publication. An *American Journal of Geography*, in fact as well as in name, published under the auspices of the geographical societies of America, would be welcome in many libraries where scarcely one of the present publications referred to finds a place. The proposed magazine, being supported directly by several societies, would be furnished to each of their members, thus securing a circulation at the start of at least 4,000. The subscriptions of teachers and those interested in geography, but residing at a distance from the cities where geographical societies exist, would largely increase this number. A section devoted to *studies for teachers* would fill the place claimed for the journal that has just appeared.

The good that such a magazine as here suggested might accomplish by reaching a larger audience, furnishing them with more varied and more carefully selected reading matter, and by maintaining a higher standard than the existing geographical publications in this country, would certainly be far greater than under the present system.

The proposed magazine might be placed under the general management of the presidents or secretaries of the affiliating societies, but the responsibility for its appearance and standing should rest with a paid editor. Possibly, also, compensation should be offered for special articles in order to keep abreast of the times and furnish opportunities to those who could not afford to give their services.

The deleterious results of diffused and frequently antagonistic efforts in publication, are painfully apparent in the low grade of many of our newspapers and popular magazines. This almost inevitable result of multiple publication may be avoided in geography by a union of interests.

Israel C. Russell.

## COMPLIMENT OR PLAGIARISM.

Now that Professor Halsted has made use of three issues of Science to prefer and establish charges of plagiarism against us, it may be well to make a comparison of the charges with the evidence as brought out in the discussion.

In his first article he says: "Without the slightest word of acknowledgment these professors [Beman and Smith] '*took*' a whole block of problems and a long note from Halsted's Elements of Geometry;" or, as he puts it more picturesquely in another place: "[They] have paid Dr. Halsted's Elements of Geometry the startling compliment of appropriating bodily Book IV., Section I., Partition of a Perigon (pp. 151–154), in their Geometry, pp. 179–181; Ginn, 1895. Elementary Geometry has been the most stable part of all science. The introduction into it, by Dr. Halsted, of the section entitled Partition of a Perigon was an utter innovation. The section, and even the very phrase 'Partition of a Perigon' had never before appeared in the world. This being the fact, the following 'deadly parallel' shows a psychologically interesting ethical color-blindness on the part of two teachers not otherwise known to have been openly immoral." Then follows a comparison of the two books, omitting the 'long note,' which seems to have disappeared from the controversy.

We have shown that the *order* of these problems is a perfectly natural one and not original with Professor Halsted. We have shown that the *solutions* of the problems in the two books are not the same. We have shown that Professor Halsted took the word 'perigon,' on which so much stress has been laid, from Sandeman's Pelicotetics without acknowledgment, and yet he affirms that "their [our] * researches on this matter turn out highly complimentary to me [him];" and that "our having reason to believe that W. B. Smith, Newcomb and Faifofer all did see the word for the first time in Halsted's books * * * surely * does me [him] great honor." Evidently "honors are easy."

That Professor Halsted furnished the facts given on page 237 of Cajori's Teaching and History of Mathematics in the United States we are not inclined to deny, but we look in vain for the slightest reference to the word 'perigon' or its origin.

That the phrase 'Partition of a Perigon' occurs only in Halsted's book and our own is true—so far as we know—but surely the notion is not so original that Professor Halsted would claim it as his personal property. Compare Henrici und Treutlein, Lehrbuch der Elementargeometrie, 1881, p. 91: "Denkt man den Vollwinkel [Vollwinkel-perigon] * * in *n* gleiche Teile geteilt;" and again, "Teilt man den Vollwinkel in *n* gleiche Teile." If this does not suggest 'Partition of the Perigon,' how would the idea be expressed in German?

In the preparation of our geometry we made considerable use of Henrici und Treutlein and in our preface we mention it first among the helps employed; with respect to the sources of his material it is not the habit of Professor Halsted to take the public into his confidence. How familiar he may have been with this book we do not know.

In answer to his last question we might say that Professor Beman saw Sandeman's Pelicotetics for the first time in the Peabody Institute library at Baltimore in February, 1882, and secured a copy for his private library that same year.

With this summing up of the evidence we cheerfully submit the whole question to the intelligent jury of readers of SCIENCE, feeling absolute confidence as to the verdict that will be rendered.

BEMAN AND SMITH.

[As the charges were first brought by Professor Halsted, it seems best to close the discussion with the reply from Professors Beman and Smith.—ED.].

## MEXICAN HIEROGLYPHS.

TO THE EDITOR OF SCIENCE: I have received the following note from Mrs. Zelia Nuttall, an expert in all that pertains to Mexican hieroglyphs, in which she shows that figures 114 and 115 of my paper in United States National Museum Report, 1894, Pp. 623–726, were not, as I supposed they might be, figures of drills. The fire drill in all countries is similar to the drill employed in making holes through hard minerals and wood. Mrs. Nuttall's correction makes it probable that the North American nor the South American either of them know other than the straight shaft.

J. D. MCGUIRE.

Fig. 114 is a copy of the hieroglyph of the town Huitzoco taken from the Codex Mendoza, p. 39, fig. 4. (See text of Codex Mendoza,