

On p. 5, in note to axioms of order (better axioms of arrangement), W. Pasch should be M. Pasch. On p. 6, first line, die Anordnung, the arrangement, is rendered 'an order of sequence.'

In II., 4, the repetition of the word 'so' destroys the statement intended.

Could there be a more pitiful bungle than that which, in the last two lines of p. 6, gives 'alle übrigen Punkte der Geraden a heissen *ausserhalb* der Strecke AB gelegen' as 'all other points are referred to the *points lying without the segment AB*.'

The translation of the important Axiom IV., 1, p. 12, is so bungled as to be worse than meaningless, actually false, as will be seen by comparing with the French translation:

Si l'on désigne par A, B deux points d'une droite *a*, et par A' un point de cette même droite ou bien d'une autre droite *a'*, l'on pourra toujours, sur la droite *a'*, d'un côté donné du point A', trouver un point et un seul B', tel que le segment AB soit congruent au segment A'B'.

On p. 13, 'emanating' is unfortunate.

On p. 15, l. 10, the angle-symbol is omitted.

On p. 17, l. 8 from below, 'so' should be 'such.'

On p. 22, theorem 16 is mistranslated, the insertion of the word 'corresponding' turning it into bathos.

But on p. 24 we have a still more ludicrous misinterpretation, which shows that Professor Townsend has not attempted to understand the book he attempts to translate. Under the heading Definitions (which should be Definition) he says: 'From this definition can be easily deduced, with the help of the axioms of groups III. and IV., all of the known properties of the circle.'

What a stupendous blunder this is we realize when we recall that thus cannot even be proved that a straight line which has a point within a circle has a point on the circle.

What Hilbert himself proves and what Townsend translates on p. 116, demonstrates that, using axioms I.-IV., we could not even show that from any point without a circle there is a tangent to the circle. Just so, without an axiom of continuity we cannot demon-

strate that a circle having a point within and a point without a second circle has a point on it.

On the same p. 24 the introduction, in l. 6 from below, of the word 'corresponding' is a childish mistranslation.

On p. 25 Professor Townsend puts in a little from Laugel, but seems to have no better luck with his French than with the German. 'This axiom gives us nothing directly concerning the existence of limiting points, or of the idea of convergence' is how he renders, 'Cet axiome ne nous dit rien sur l'existence de points limites ni sur la notion de convergence.'

But the game would not be worth the candle to go on thus through all the 132 pages.

So I choose as a fitting climax the sentence on p. 125, 'We easily see that the criterion of theorem 44 is fulfilled, and, consequently, it follows that *every regular polygon can be constructed by the drawing of straight lines and the laying off of segments*.'

From this we should suppose that Professor Townsend studied his geometry from the popular treatise of Mr. Wentworth between 1877 and 1887, which during those years contained on p. 224, Proposition XIII., § 387: 'To inscribe a regular polygon of any number of sides in a given circle.'

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#### SCIENTIFIC JOURNALS AND ARTICLES.

*The Journal of Physical Chemistry*. March. 'On the Relative Velocities of the Ions in Solutions of Silver Nitrate in Pyridin and Acetonitril,' by Herman Schlundt. The ionic velocities found are considerably lower than in water, but this difference seems to decrease with increasing dilution. 'On the Inversion of Zinc Sulfate, II.,' by H. T. Barnes and H. L. Cooke. 'Synthetic Analysis of Solid Phases,' by Wilder D. Bancroft. Description of a new method, applicable to alloys, efflorescent substances, basic salts, and double salts which are decomposed by the pure solvent, where the solid phase cannot be conveniently isolated in a pure state. 'A Derivation of the

Phase Rule,' by J. E. Trevor. 'Limitations of the Mass Law,' by Wilder D. Bancroft.

April. 'Molecular Attraction,' by J. E. Mills. The presentation of evidence to prove that molecular attraction, like gravitation, varies inversely as the square of the distance apart of the molecules, that it is only slightly affected by changes in temperature, and that it depends primarily upon the chemical constitution of the molecule and not upon its mass. 'Studies in Vapor Composition, II,' by H. R. Carveth. 'On the Stability of the Equilibrium of Univariant Systems,' by Paul Saurel. 'On the Fundamental Equations of the Multiple Point,' by Paul Saurel.

#### SOCIETIES AND ACADEMIES.

##### THE AMERICAN ANTHROPOLOGICAL ASSOCIATION.

As announced in *SCIENCE* for June 27, and as briefly noted in the report of the Secretary of Section H of the American Association for the Advancement of Science (this volume, p. 201), an American Anthropological Association was formally established on June 30. The founding meeting was held in Oakland Church, Pittsburgh, under the Chairmanship of Stewart Culin, Vice-president of Section H of the American Association for the Advancement of Science. After the adoption of a constitution the following executive officers were elected:

*President*, W J McGee; *Vice-President* for four years, F. W. Putnam; *Vice-President* for three years, Franz Boas; *Vice-President* for two years, W. H. Holmes; *Vice-President* for one year, J. W. Powell; *Secretary*, George A. Dorsey; *Treasurer*, Roland B. Dixon; *Editor*, F. W. Hodge.

The plan of the organization providing for a Council large enough to include the leading workers in American anthropology, the following persons, all of whom except two (who chanced to be abroad) had indorsed the objects of the Association, were elected Councilors: Frank Baker, Henry P. Bowditch, A. F. Chamberlain, Stewart Culin, Livingston Farrand, J. Walter Fewkes, Alice C. Fletcher, J. N. B. Hewitt, Walter Hough, Alés Hrdlicka, A. L. Kroeber, George Grant MacCurdy, O. T. Mason, Washington Matthews, J. D. McGuire, James Mooney, W. W. Newell, Frank Russell,

M. H. Saville, Harlan I. Smith, Frederick Starr, John R. Swanton, Cyrus Thomas, and E. S. Wood.

The Association arranged to hold the next regular meeting at Washington, in connection with the meeting of the American Association for the Advancement of Science during Convocation Week, 1902-03.

A session for the representation of scientific papers was held jointly with Section H, as already reported in *SCIENCE*.

The following preamble and resolutions were adopted:

"WHEREAS, The Second International American Conference, commonly known as the Pan American Congress, in session duly assembled in the City of Mexico, January 29, 1902, adopted a recommendation to the several American nations participating in the Conference, that an 'American International Archaeological Commission' be created, to promote archeological research, to aid in the preservation of antiquities, and to endeavor to establish an American International Museum; and

WHEREAS, The recommendation is in full accord with the spirit and objects of American science; therefore

"*Resolved*, That the American Anthropological Association heartily concurs in the recommendation of the Second International American Conference.

"*Resolved further*, That the Secretary of the Association send a copy of these Resolutions to the Director of the Bureau of American Republics as an expression of the judgment of the Association."

Undoubtedly the founding of the new association will meet a need long felt by the anthropologists of the United States; it was indeed the consummation of a movement started in 1896 when the Anthropological Section of the American Association for the Advancement of Science began holding winter meetings. The action at Pittsburgh was especially notable for the unanimity shown by the representatives of all sections of the country. Most of the leading anthropologists of America were present in person; and it may be said that all were in some way represented.