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Reprint of the Reports of the Mathematical Association Committee on the "Teaching of Elementary Mathematics," viz. Geometry, Algebra, Arithmetic, Mechanics, and Advanced School Mathematics, together with the Regulations and Syllabus for Geometry in the Cambridge Previous Examination. Price 6d. net. Report on the "Teaching of Mathematics in Preparatory Schools." Price 3d. net. Report, of a Joint Committee of the Mathematical Association and the Association of Public School Science Masters, on "The Correlation of Mathematical and Science Teaching." Price 6d. net. Messrs. GEORGE BELL & SONS, Portugal Street, Kingsway, London.

First Meeting of the London Branch of the Mathematical Association. 29-1.10.

Some diagrams in continuation of those presented by
Mr. R. F. DAVIS at the preliminary meeting.

A $B_1 C$ is an acute angled triangle, sides a, b, c , angle C and
A $B_2 C$ is an obtuse angled triangle sides a_2, b, c , angle $180^\circ - C$

Fig. I. consists of two rhombi, side $a + b$, angles C and $180^\circ - C$.

Fig. II. consists of two parallelograms, sides $a + b$ and $a_2 + b$,
angles C and $180^\circ - C$.

Removing the coloured areas the remainders are equal—
so

$$\begin{aligned} c^2 + ax &= a^2 + b^2 \\ \text{or } c^2 &= a^2 + b^2 - 2a \text{ CM} \quad \left. \begin{array}{l} \text{I} \\ \text{II} \end{array} \right\} \\ c^2 &= a_2^2 + b^2 + a_2 x \\ &= a_2^2 + b^2 + 2 a_2 \text{ CM} \end{aligned}$$

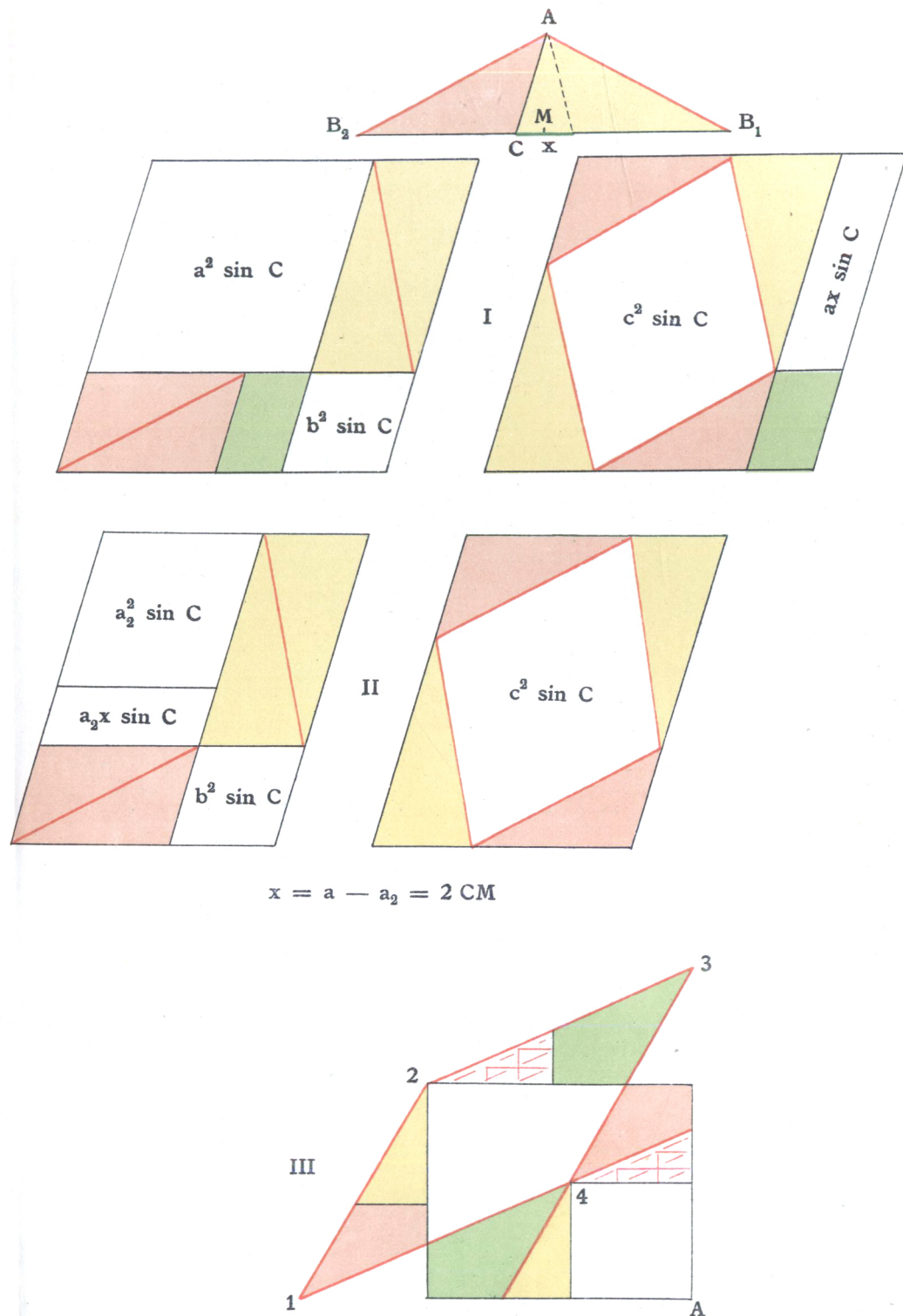
Fig. II shows also how to inscribe in a parallelogram a rhombus
whose angles are equal to the angles of the parallelogram
(when possible).

Fig. III shows that the area of the parallelogram 1 2 3 4 is equal
to the difference of the rectangles A2 and A4

so

$$\text{Area of parallelogram} = (x_3 - x_2)(y_2 - y_1) - (x_3 - x_4)(y_4 - y_1)$$

C. S. Jackson.



$$x = a - a_2 = 2 \text{ CM}$$

BOOKS, ETC., RECEIVED—Continued.

Wiadomości Matematyczne. Edited by S. DICKSTEIN. Vol. XIII. Nos. 5-6. Pp. 77, 74. 1909. (Warsaw.)

School Science and Mathematics. Vol. X. No. 75. Edited by C. H. SMITH. 2 dols. per ann.

Explanation of the term Fourth Dimension. G. A. MILLER. *Measuring Instruments of long ago.* W. E. STARK.

Problèmes et Exercices de Mathématiques Générales. By E. FABRY. Pp. 420. 10 frcs. 1910. (Hermann.)

Methodologisches und Philosophisches zur Elementar-Mathematik. By G. MANNOURY. Pp. 276. 8s. 10d. Unbound. 1909. (Visser, Haarlem.)

Über das Logarithmische Potential einer Gweißen Ovalfläche. By C. NEUMANN. (*Math. Phys. Kl. der Königl. Sächsischen Gesellschaft der Wiss.*) Vol. XXXI. No. 2. Pp. 83-162. 3 m. Unbound. 1909. (Teubner, Leipzig.)

Handbuch der Lehre von der Verteilung der Primzahlen. By E. LANDAU. Vol. I., xviii, 564; Vol. II., ix, 565-961. 34 m. Unbound. 1909. (Teubner.)

Mathematische Unterhaltungen und Spiele. By W. AHRENS. 2nd edn. Revised and enlarged. Fol. I. 7·50 m. Bound. 1910. (Teubner.)

Didaktik des Mathematischen Unterrichts. By ALOIS HOFLER. Pp. xviii, 507. 12 m. Bound. 1910. (Teubner.)

Sechs Vorträge aus der reinen Mathematik und Mathematischen Physik. By HENRI POINCARÉ. *Mathematische Vorlesungen an der Universität Göttingen, IV.* Pp. 60. 1·80 m. Unbound. 1910. (Teubner.)

Über die Fredholmischen Gleichungen—Anwendung der Theorie der Integralgleichungen auf die Flutbewegung des Meeres—Anwendung der Integralgleichungen auf Hertzsche Wellen—Über die Reduktion der Abelschen Integrale und die Theorie der Fuchsschen Funktionen—Über transfinite Zahlen—La Mécanique nouvelle.

THE DYNAMICAL THEORY OF SOUND

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