THE

MATHEMATICAL

GAZETTE

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All correspondence concerning the *contents* of the **Gazette** should be addressed to W. J. GREENSTREET, Marling Endowed School, Stroud, Glos.

Correspondence relative to the **Mathematical Association** or the *distribution* of the **Gazette** should be addressed to one of the Hon. Secretaries:—C. PENDLEBURY, St. Paul's School, London, W.; H. D. ELLIS, 12 Gloucester Terrace, Hyde Park, W.; Miss E. GREENE, 7 Glenluce Road, Blackheath, S.E.

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CONTENTS.

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 $180° — C$

Fig. I. consists of two rhombi, side $a + b$, angles C and $180° — C$.

Fig. II. consists of two parallelograms, sides $a + b$ and $a_2 + b$,
angles C and $180° — C$.

Removing the coloured areas the remainders are equal—
so

$$\left.\begin{array}{l} c^2 + ax = a^2 + b^2 \\ c^2 = a^2 + b^2 - 2a \ CM \end{array}\right\} \ I$$

or
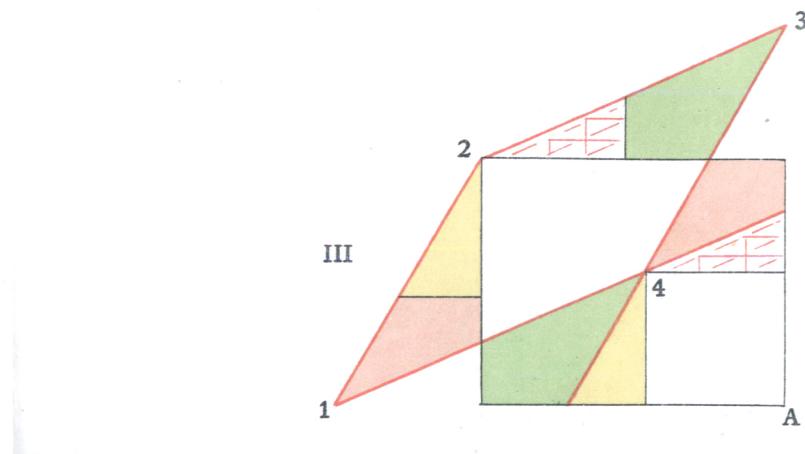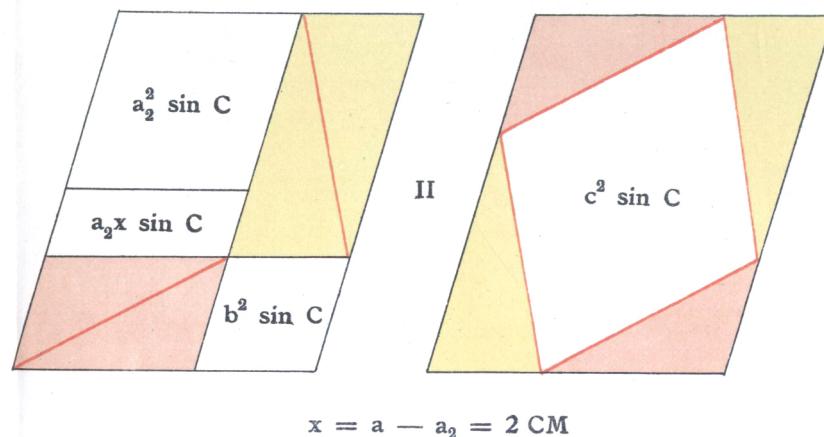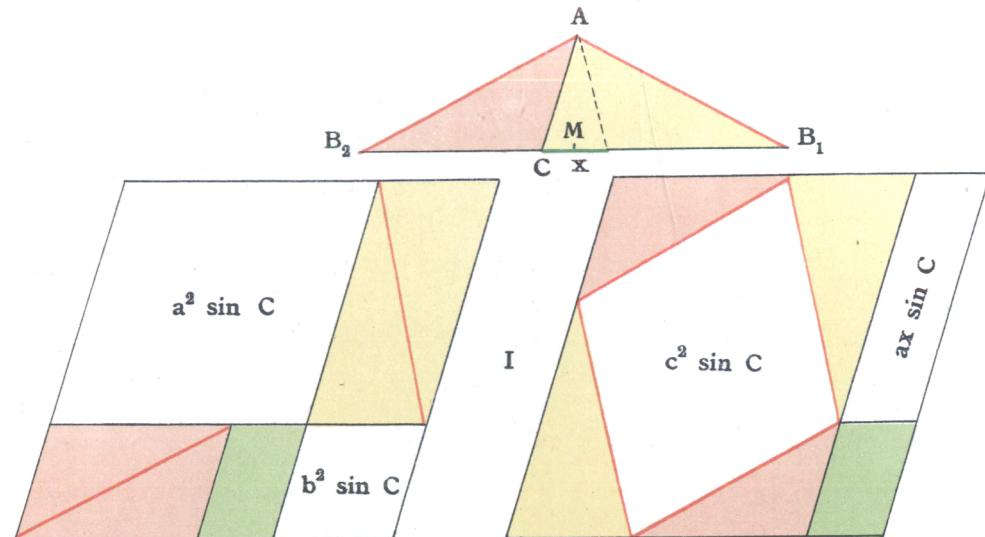
$$\left.\begin{array}{l} c^2 = a_2^2 + b^2 + a_2 x \\ = a_2^2 + b^2 + 2 a_2 \ CM \end{array}\right\} \ II$$

Fig. II shows also how to inscribe in a parellelogram 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
   Area of parallelogram $= (x_3 - x_2) (y_2 - y_1) - (x_3 - x_4) (y_4 - y_1)$

<div align="right">C. S. Jackson.</div>

$x = a - a_2 = 2 \ CM$

THE DYNAMICAL THEORY

OF

SOUND

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