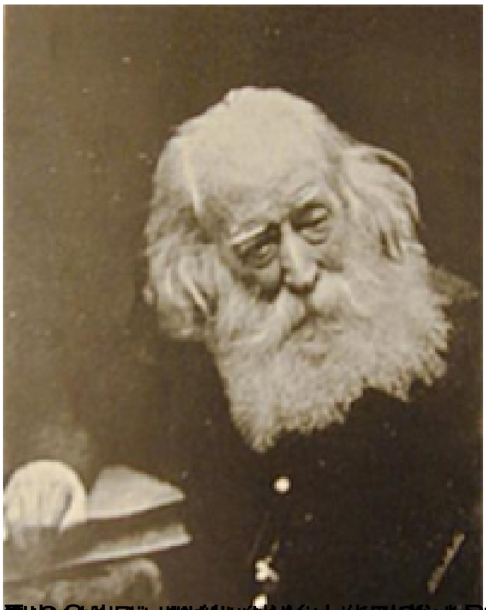
Escrito por Grupo Alquerque
Jueves 01 de Marzo de 2012 15:00

Hasta ahora en esta sección hemos tratado muchos recursos, dedicando cada entrega a un tipo de material distinto: puzzles, dominós, trucos de magia, juegos de tablero y fichas, etc. A veces hemos citado el material presentado por el nombre del matemático creador, como Pitágoras o Arquímedes, pero hasta ahora no habíamos dedicado un artículo completo a una persona, y quizás iba ya siendo hora.

Esta entrega la vamos a dedicar a todas aquellas personas que, no siendo matemáticos, han sido unos apasionados de esta materia, y aunque dedicados a otras profesiones más o menos alejadas de las matemáticas o las ciencias, la han estudiado y han aportado sus descubrimientos a la historia de esta disciplina. Quizás el nombre que a todos se nos viene a la cabeza como más representativo de este grupo de personas es el de Fermat, aunque existen muchas otras personas que han quedado inscritas en la historia unidas a algún resultado que ha alcanzado notoriedad. Ese es el caso de Henry Perigal, nuestro personaje de hoy.

Un gran aficionado a los puzzles geométricos.

Henry Perigal [i] (1801–1898) fue corredor de bolsa hasta los 87 años en que se retiró para dedicarse más a fondo a sus estudios, pero durante toda su vida fue un gran aficionado a las matemáticas y a la astronomía. La mayoría de sus trabajos y pensamientos los conocemos gracias a que un hermano menor, Frederick, los publicó después de su muerte.



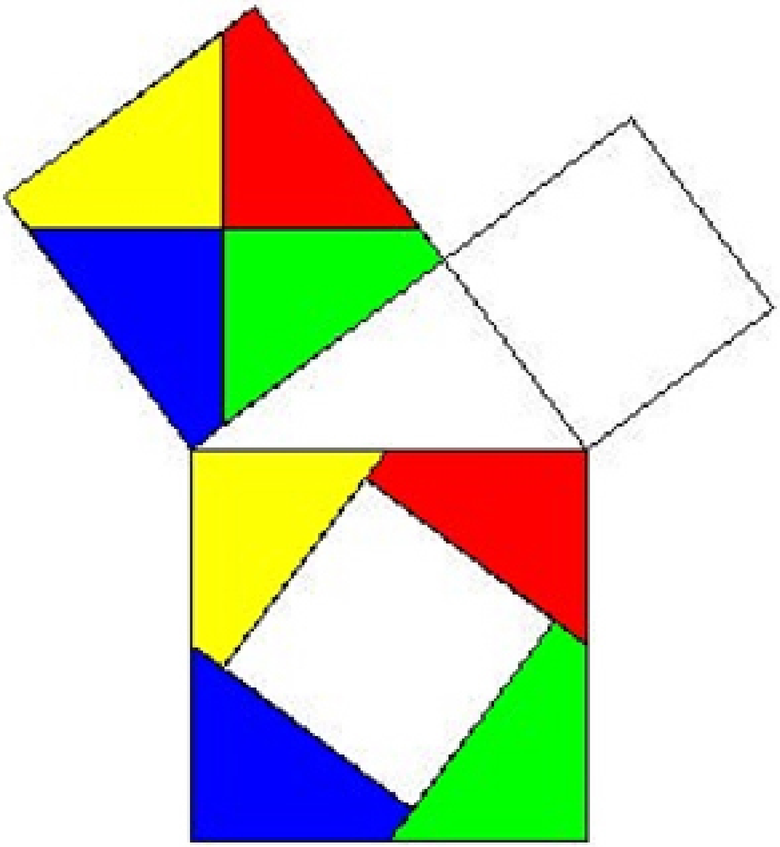
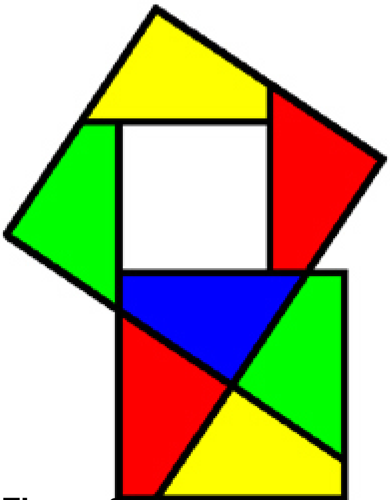
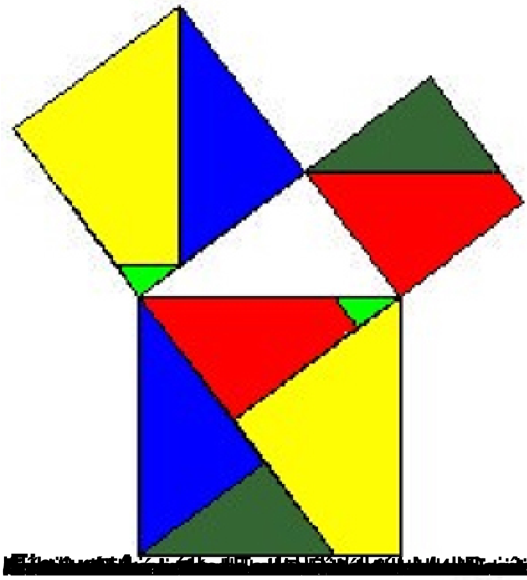
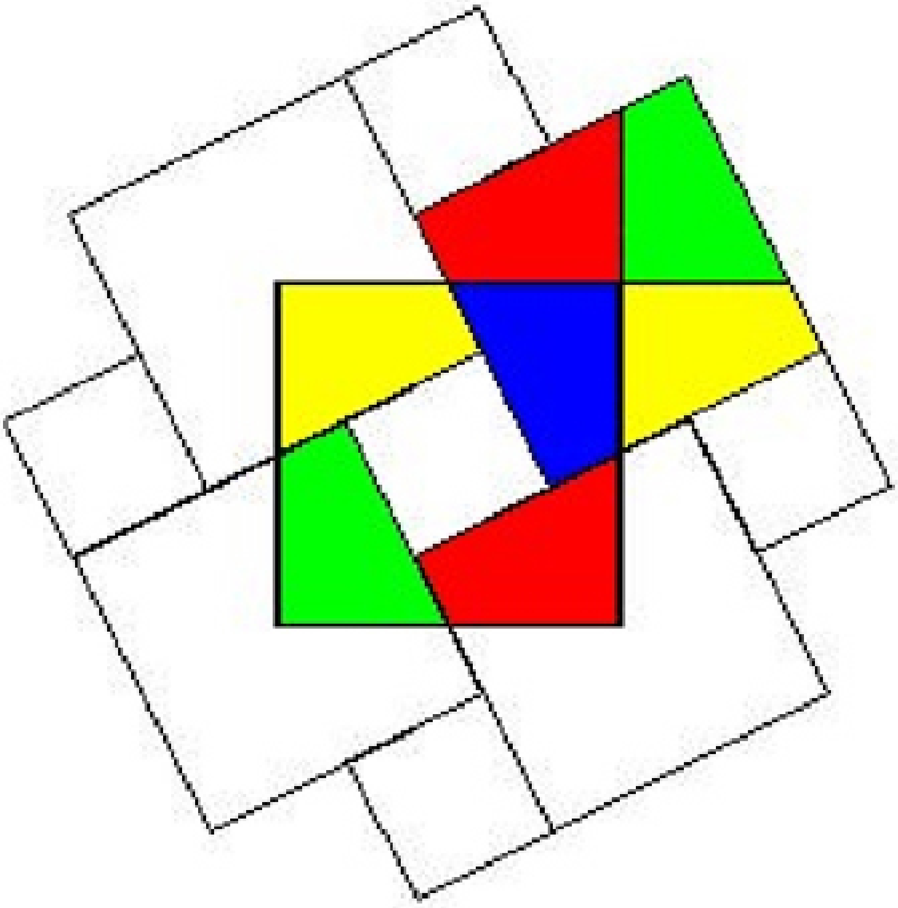


Figura 2







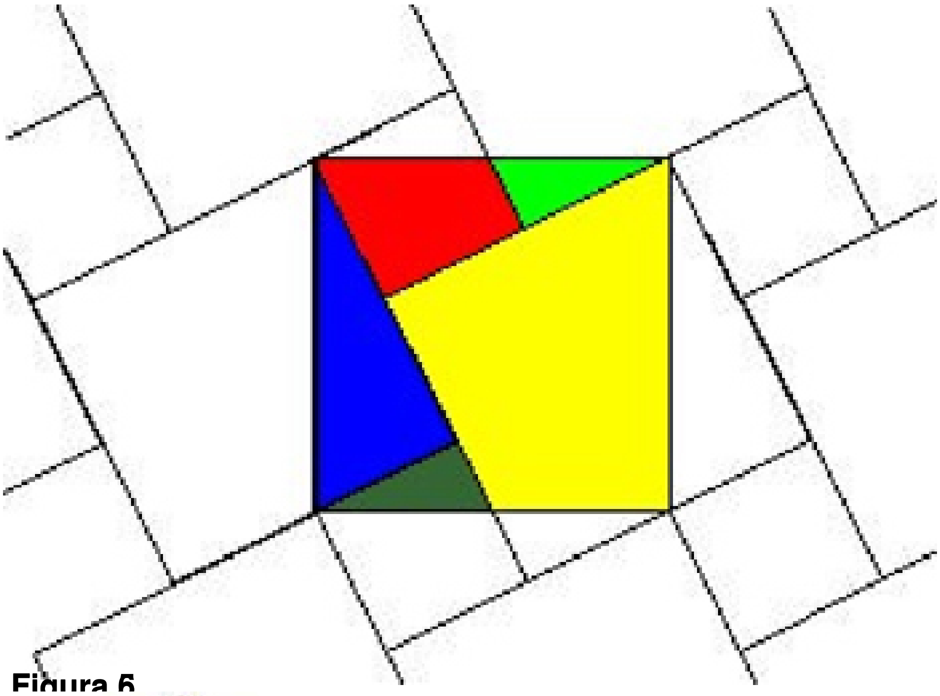
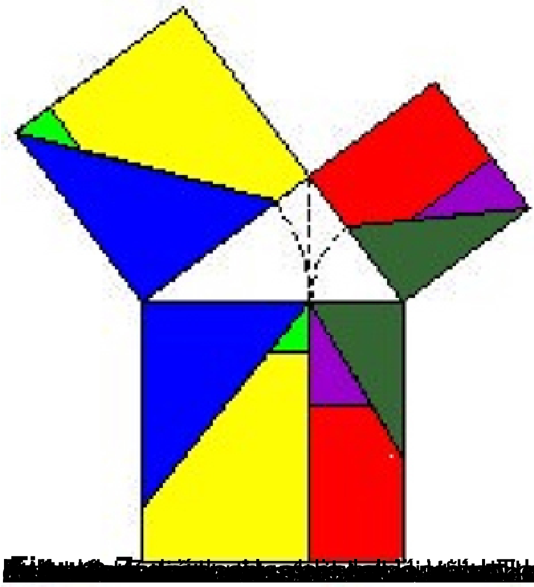


Figura 6



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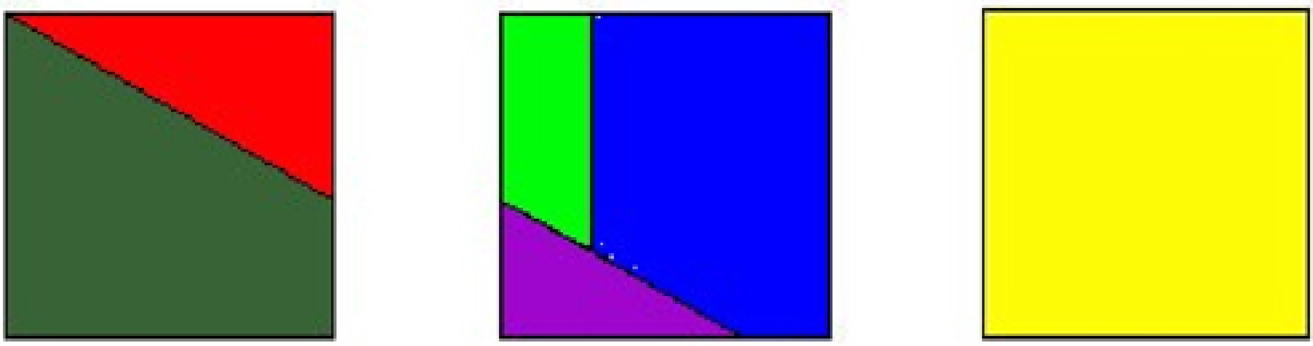


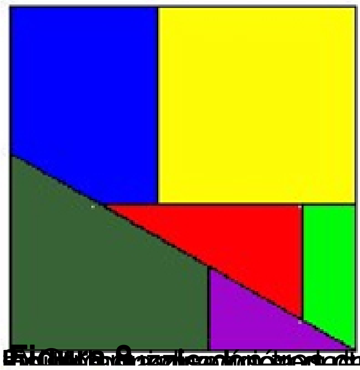
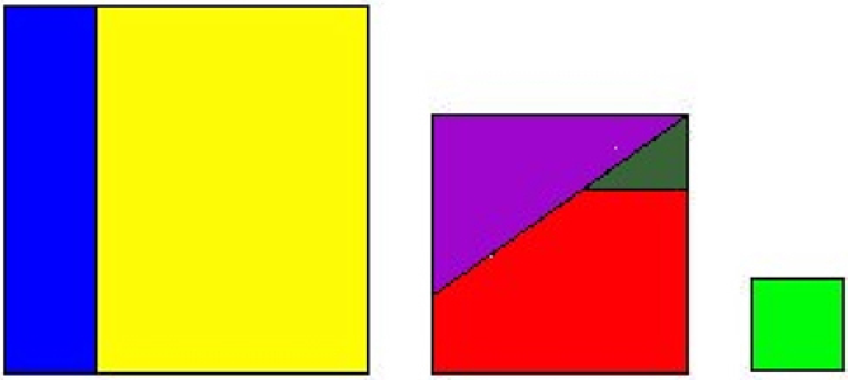


Figura 9



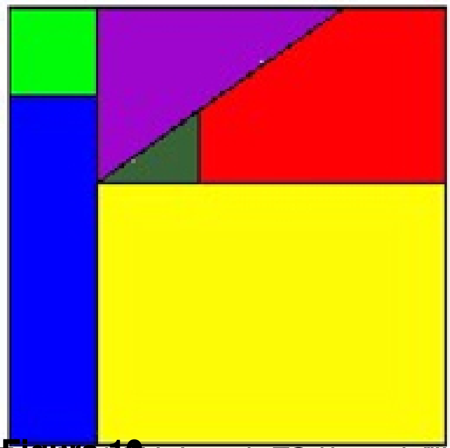


Figura 10

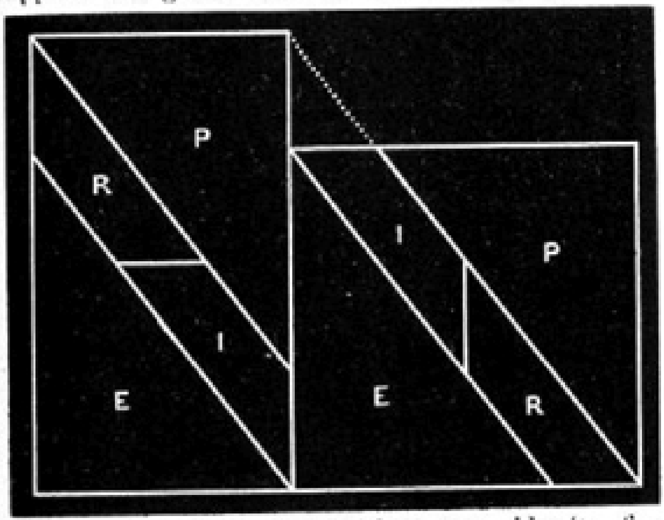
(103)

GEOMETRICAL DISSECTIONS AND TRANSFORMATIONS. No. II.

By *Henry Perigal, F.R.A.S. &c.*

To convert a square into a rectangle equal to it in area, of which one side is given. (The converse of Euclid II. 14).

Suppose the given side of the rectangle greater than



the side of the square, and produce one side (to fix the ideas, say a vertical side) of the latter so as to be equal to it. Join the new extremity (which call A) of this line to the furthest corner of the square, and from the other extremity measure a distance equal to that to which the line was produced (*i.e.* equal to the difference of the given rectangle-side and square-side). From this point draw a parallel to the inclined line previously drawn through A; this will cut off from a horizontal line through A a length equal to that of the other side of the rectangle.

The proof by dissection is obvious, for if the construction be completed as in the figure (in which observe that all the lines are horizontal, vertical, or parallel to the inclined line first drawn through A), we see at once that the two P's and the two E's are equal, while by drawing vertical and horizontal lines through the centres of the square and rectangle respectively, we divide the remaining trapezia into two parts I and R, which are equal in both.

I may notice that all the four parts of the square are thus shifted so as to form the rectangle by translation alone (without rotation), as each line is parallel to its analogous line.

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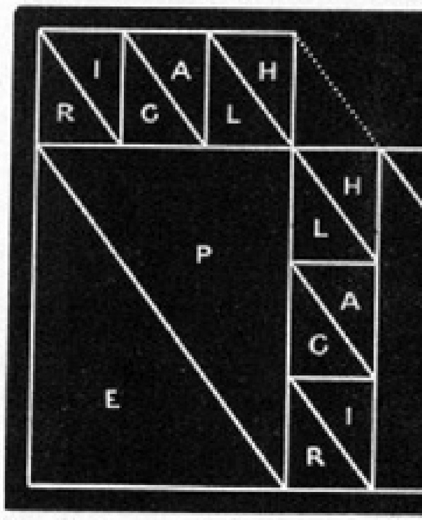
If the given side of the rectangle
square, the same construction hold
the portions $I+R$ are bounded by ve
and horizontal lines in the rectangle.
The point of the construction, o
being such that the pieces into w
either the square or rectangle, but i
simple to deserve notice on its ow
remember to have met with it a
elegance of the Euclidian construct
garded as rendering any other superf
I here append another constructio
which is also demonstrated to the
transposition. The figure almost exp



The first part of the construction
but the first parallel to the original
through the A corner (nearest to the
the line), so forming the equal triangl
is evident from the figure.
In this method also, the transposi
by translation, all analogous lines bein
Of course similar dissections are
valent rectangles, or to two equiva
equiangular.

9 North Crescent, Bedford Square, W.C.
Aug. 20, 1874.