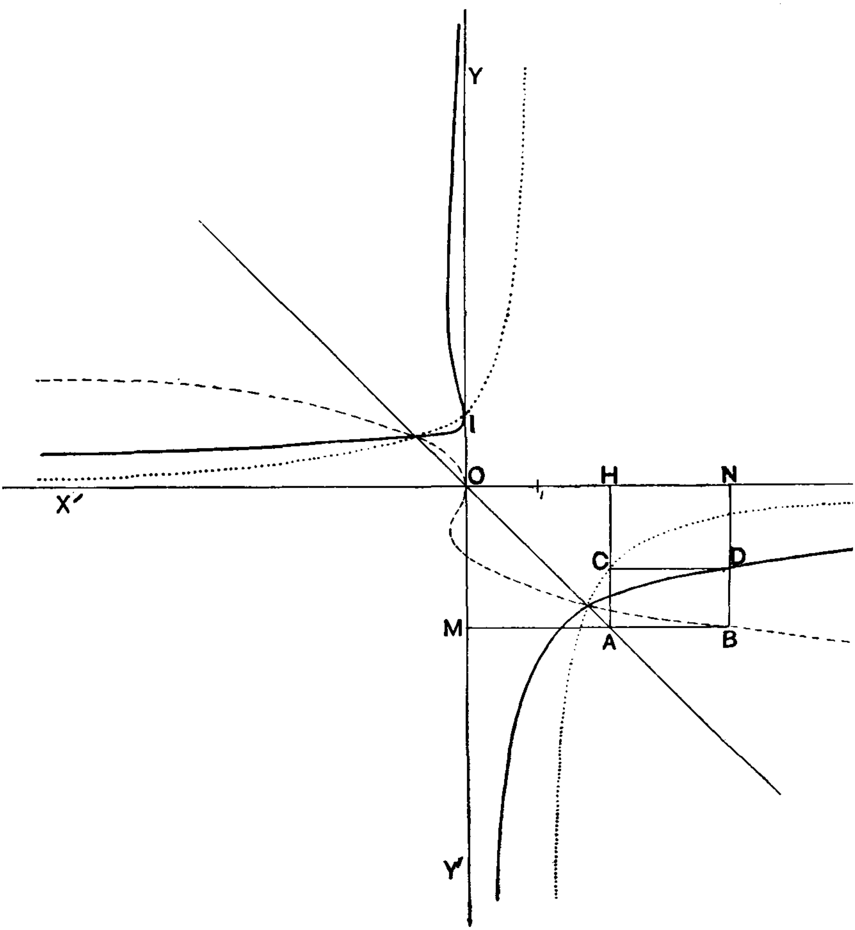
The experiment is finished by burning the cord between P and P′; M and W mount side by side.

J. A. M'BRIDE

A Method of Graphing Freedom Equations.—Draw axes XOX′, YOY′. Draw graph of $y=\phi(t)$, taking OX as a positive axis of t. (In Figure $\phi(t)=\dfrac{1}{1-t}$; see dotted line). Draw graph of $x=f(t)$, taking OY′ as positive axis of t. (In Figure $f(t)=t^3-t^2$; see broken line). Take any point A in the line



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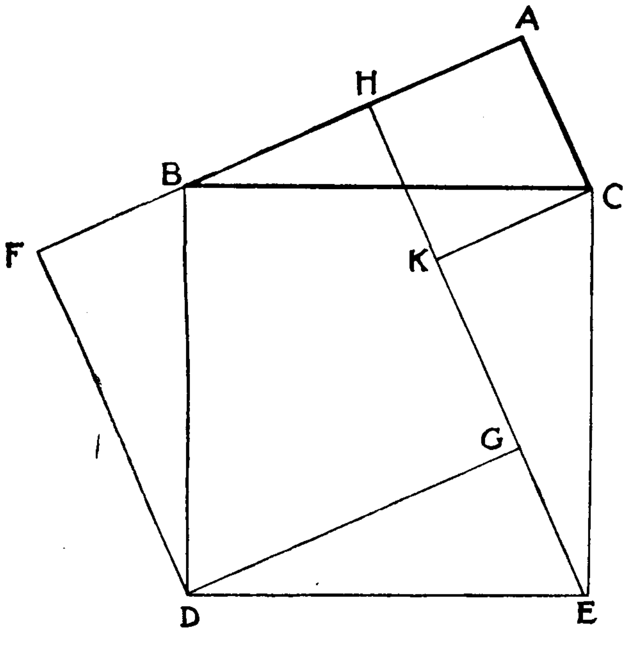
$+x=0$. Go along line through A parallel to OX till a point B n the graph $x=f(t)$ is met, and vertically parallel to OY until a oint C in the graph $y=\phi(t)$ is met. The fourth vertex D of the ectangle ACDB is a point in the graph of the eliminant of t in he equations $x=f(t)$, $y=\phi(t)$.

When $t=\text{OM}$, $x=\text{MB}=\text{ON}$, and when $t=\text{OH}$, $y=\text{HC}=\text{ND}$. Vhen $x=\text{ON}$, $y=\text{ND}$. Hence D is a point in the graph of the liminant. By taking a series of points in $y+x=0$, points in the raph of the eliminant can be found. (In the Figure the graph of he eliminant is the line drawn in full).

A. G. Burgess

The Theorem of Pythagoras.—Here is a pendant to Dr Gibson's beautiful dissection of the three squares. I am pretty ure that his proof is new to the world, but I am not sure that mine s so. There are about fifty proofs, differing more or less from each ther, but there are only some half a dozen worth remembering or



eaching. The proof I submit (not one of the half dozen) was levised in 1859, when I was a young student in St Andrews, and t may probably have been given long before that date.

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