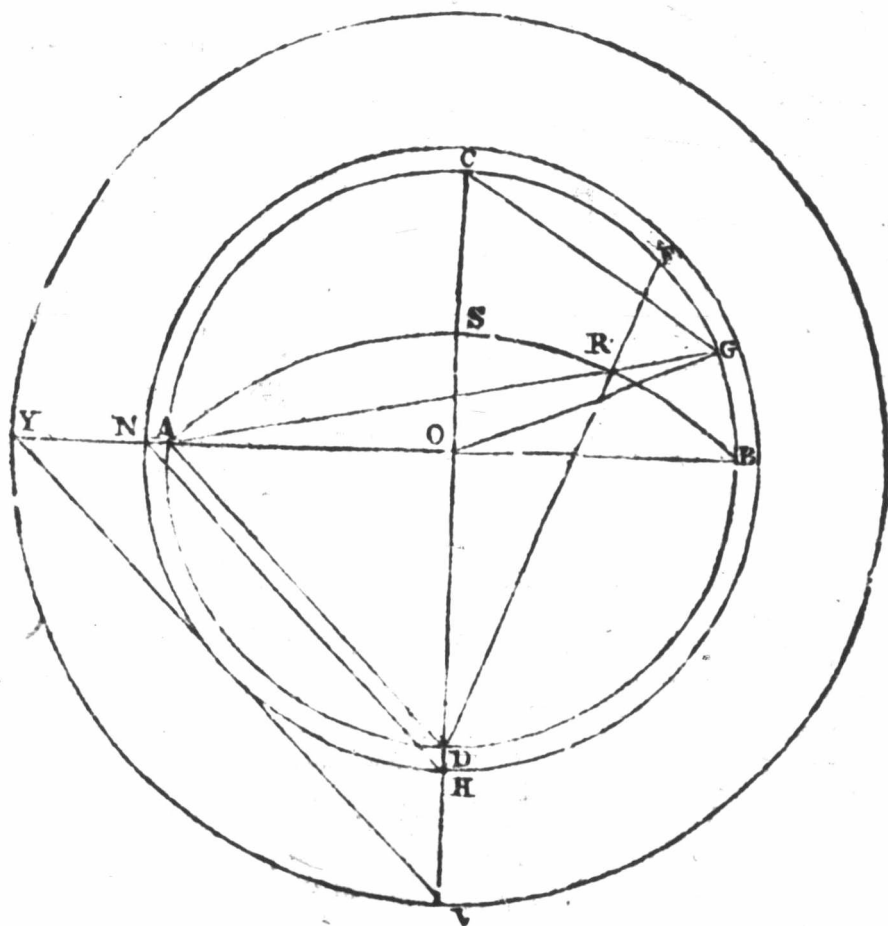


of three-fourths of a quadrant (viz. three-sixteenths) of another circle, whose radius is the side of a square inscribed in the first circle. Or upon the same principle,

The quadrature of a circle, is equal to a square inscribed in another circle, whose radius is the chord of three-fourths of a quadrant (viz. three-sixteenths) of the first circle.

I do not expect, Mr. Editor, you can supply your readers with a figure similar to the inclosed; therefore I will endeavour to give such an enunciation of the above rules, as those who choose, may easily construct figures for themselves.*



In the given circle $A C B D$ of which, it is required to find a rectilineal figure equal to the circumference, draw the diameters $A B, C D$, at right angles; join $A D$: $A D$ is the side of a square within the circle. Next, about the centre D , with radius $D A$, describe another circle, passing through the points A, B , and cutting $C D$ in the point S : then $A S B D$ is the quadrant of a circle, whose radius $D A$ is the side of a square within the circle $A C B D$. Bisect the arch $C B$, in the point F ; join $F D$: $S B$ is bisected in the point R . Draw $A R$, the chord of the arch

$A S R$, which is three-fourths of the quadrant $A S B D$; $A R$ will be equal to the arch $C F B$, and, consequently, the square described upon $A R$, is equal to the circumference $A C B D$.

Or thus, by the second method. In the same figure, bisect $F B$ (which may be done by producing $A R$) in the point G : join $C G$: about the centre O , with the distance $C G$, describe another circle $N H$, and through the points A, D , of the first circle, produce the diameters to the points $N H$, of the second; join $N H$: $N H$ will be equal to the arch $C F B$:

*As we ardently desire the improvement of the inhabitants of Nova-Scotia, in literature, and general and useful knowledge, we have got the figure cut by Mr. Torbett, that the demonstration may be the more easily perceived by our mathematical readers.—ED.