$$
\begin{array}{ccccccccc}
1 & \longrightarrow & H & \xrightarrow{\ \alpha\ } & G & \xrightarrow{\ \beta\ } & K & \longrightarrow & 1 \\
& & \Big\downarrow{\scriptstyle \mathrm{id}} & & \Big\downarrow{\scriptstyle \theta} & & \Big\downarrow{\scriptstyle \mathrm{id}} & & \\
1 & \longrightarrow & H & \longrightarrow & H \times K & \longrightarrow & K & \longrightarrow & 1
\end{array}
$$