4. The assembly shown rotates about a vertical axis at a constant rate. Knowing that the coefficient of friction between the small block A and the cylindrical wall is 0.20, determine the lowest speed \( v \) for which the block will remain in contact with the wall.

\[
\begin{align*}
\mu N &= mg \\
\frac{\mu N}{g} &= \frac{mg}{g} \\
\mu &= \frac{9.8}{0.20} = 49 \\
v^2 &= \frac{g\mu}{\mu} \\
v &= 10.36 \text{ ft/sec}
\end{align*}
\]