1127-55-15 **Niles Johnson*** (`niles@math.osu.edu`). *A 2-categorical group completion.* Preliminary report. We discuss a 2-categorical construction generalizing Quillen's $S^{-1}S$. This provides a group-completion for 2-dimensional symmetric monoidal algebra which models topological group-completion. We apply this to prove the 2-dimensional stable homotopy hypothesis. This work is joint with N. Gurski and A. Osorno. (Received November 07, 2016)