THE FIFTY-FIVE CENT FIX

Do a coin-flip trick you can't lose.

THE SETUP
When you drop a coin you have a fifty-fifty chance of getting heads. When you drop a pair of coins, you can stack them in a way that also stacks the odds. You can’t lose! The coin that starts out on top ends upon the bottom one-hundred percent of the time.

You will need:
• 2 quarters
• 1 nickel

Make a sandwich of the coins with the nickel in the middle. Hold the stack of coins between your thumb and index finger so the coins are horizontal. Cup your other hand about ten inches below the coins. Spread your fingertips apart so you release the bottom quarter yet still hold on to the top one. The quarter starts its downward trip with the nickel riding on top. Surprisingly, when the two coins land in your hand, the quarter is on top.
INSIDER INFORMATION
Why does the nickel always end up below the quarter? The coins flip. Holding on to the top quarter makes it nearly impossible to release both sides of the bottom quarter at the same instant, so one side drops sooner, causing both coins to rotate. It takes a fall of about ten inches for the nickel and the quarter to flip over (turn 180 degrees).
If the coins flip 180 degrees in a ten-inch drop, how far would they have to drop to make a 360-degree rotation so the nickel is back on top? You might think twenty inches. But gravity is working here, causing the coins to accelerate as they fall. It would take a forty-inch drop to accomplish this feat. When they landed from this height they’d probably bounce apart anyhow.