ODDS THAT ARE OUT OF SIGHT

Bet you can’t see a penny through a glass of water!

THE SETUP
Fill a glass with water right to the brim. Then place it on top of a penny. Cover the top of the glass with a saucer. Can you see the penny?

INSIDER INFORMATION
Don’t strain your eyes! You won’t see the penny. In order to see something, light reflected from the object must reach your eyes. Since light can pass through water, it’s puzzling that there is no spot where we can see the penny.
Actually, there is a spot but it is covered by the saucer. The light rays are bent as they pass from one transparent substance to another. This moves the image of the penny upward (that’s why the bottoms of pools seem shallower than they really are).
When the penny is under the glass, you can’t see it unless you look straight down. The saucer prevents this.
For a very strange illusion, remove the saucer and view the surface of the water from the side. The image of the penny will appear on the surface of the water.