Invisible Shield

If you've ever been caught in the rain and tried to keep dry by putting a newspaper over your head, you know that water doesn't treat paper very well. But in the following experiment the paper seems to be protected by an invisible shield.

**What to do:** Crumple the sheet of newspaper and stuff it into the empty glass tightly enough so that it doesn't fall out when you turn the glass upside down. Holding the glass bottom up, sink it deep into the jar filled with water. Hold it there. After a minute or so, pull the glass out of the water and remove the paper.

**What happens:** The paper is dry.

**Why:** Water cannot get into the glass because the "empty" glass is already filled with air and the air cannot get out because it is lighter than water.