



In 1712 Newcomen invented the world's first successful atmospheric steam engine. The engine pumped water using a vacuum created by condensed steam.

ap test

Under standard atmospheric conditions the expansion of liquid water into steam is about 1 to 1700

There are about 120 cups per cubic foot  
Therefore one cup of water converted into steam would fill  
 $1700/120 = 14.2$  cubic feet at standard atmospheric pressure.  
This amounts to about 106 gallons  
(There are 16 cups per gallon)