

same experiment was observed as follows. The meniscus between the two liquids is visible on account of the different indices of refraction. At ordinary temperature the index for chloroform is 1.45, while that of water is 1.33. The index for chloroform decreases more rapidly with rising temperature than does that of water, so that eventually the index of chloroform falls below that of water. When the two indices are equal the separating surface disappears from view to reappear again when the temperature is raised still more. The disappearance is so complete that when the experiment was first made it was given up at this point, as there was every appearance of homogeneity just as though mixture of the two liquids was complete. In the case described above the temperature for disappearance of the meniscus is considerably below that at which the liquids change places.

The tube used was a thick-walled tube about 6 cm. long with internal diameter of 7 mm.