

Method of arranging nozzle elements in a heat and mass transfer apparatus, in which nozzle elements with longitudinal channels are taken and arranged in a vertical position in horizontal layers such that adjacent nozzle elements in each horizontal layer are in contact with one another, after which longitudinal inserts are placed between the nozzle elements within the horizontal layer. The nozzle elements within the horizontal layer are arranged in-line. Each longitudinal insert, shaped as a straight regular quadrangular prism with identical longitudinal ribs perpendicular to the side faces and located at their centers, is placed between four adjacent nozzle elements in contact with them, each of which has an outer shell in the form of eight identical open straight cylindrical shells inscribed in an imaginary straight circular cylinder, uniformly spaced in the circumferential direction, and connected to one another at every other edge; these shells have a cross-section in the form of the convex part of a rectangular oval. Inside the outer shell, an inner shell is coaxially arranged in the form of a straight circular annular cylinder with open bases and mutually perpendicular internal longitudinal partitions, the longitudinal edges of which are located at the junctions between the open straight cylindrical shells comprising the outer shell.