

On Peculiarities of Setting Boundary Conditions for Cusped Shells, Plates, and Bars

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Structures of complicated geometry play very important role in the modern practical constructions. Thin and fine elastic parts of structures with angles and cusps such as cusped (tapered) shells, plates and bars belong to the complicate components of constructions. The lecture gives foundations of the theory of such bodies. Their consideration leads to non-classical problems in mathematical and mechanical points of view in the sense of setting boundary conditions in the corresponding boundary and initial-boundary value problems. The main attention will be paid to explanation of peculiarities of setting boundary conditions for cusped shells, plates, and bars.