extracted from Ref. 4 for a load parameter of $pa^4/Et^4 = 278.5$ and $\nu = 0.316$. Nondimensional forms of the central membrane and bending stresses (σ) and central deflection (w) are tabulated for a simply-supported square plate under a uniform pressure p, with side a, thickness t, Young's modulus E and Poisson's ratio ν.

It is evident that Levy's original data are in error, especially in the bending stress estimate.

The differences in boundary constraints are as follows; whereas the finite element in-plane boundary constraints stipulate and satisfy, at least for high-precision elements,[4] that the midplane displacements u and v are zero along a simply-supported edge, Levy[3] only constrains the average in-plane deflection normal to an edge to be zero. In addition, by choice of a midplane stress function, Levy forces the membrane shear stress along a simply-supported boundary to vanish, in contrast to the finite element constraints which permit a nonzero shear stress to exist along the edge. The influence of these constraint discrepancies may be small but could account for small differences between accurate finite element data and a refined and recomputed form of Levy's data.

A more suitable method for comparison purposes is that of Iyengar,[7] who employs trigonometric expansions for the in-plane displacements, rather than the midplane forces, and can thus exactly satisfy the condition of zero in-plane displacement normal to an edge, although the displacement along the edge is still left nonzero.

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Errata: "Swirling Nozzle Flow Equations from Crocco's Relation"

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EQUATION (14) of this Note can only be applied to a constant-area pipe because the radial velocity component was neglected in the energy Eq. (8) and the axial derivative of radial velocity was neglected in the Crocco Eq. (2). In this case, those arbitrary functions $C_1(z)$ and $C_2(z)$ appearing, respectively, in Eqs. (17), (18) and (23) are just constants. It should be noted that the radial velocity together with its derivatives should be retained for obtaining the axial flow variations along a nozzle.

Furthermore, the author made a statement "Mager employed a nondimensional velocity, $M = w/[a_0{}^2-(\gamma-1)w^2/2]^{1/2}$, which is not a Mach number as he claimed." The last three words "as he claimed" should be deleted. In a recent private communication with Mager, he indicated the M, which is called the Mach number of a "related" flow in his paper should be interpreted as, for example, one consisting of the axial velocity only but having the same total speed of sound as the swirling flow.

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