



FIG. 1

(b) All precessions. K_3^2 equals 8, Fig. 9; lines three and eight, Fig. 11.

(c) Lower negative precession. K_3^2 below 1, Fig. 9; line five, Fig. 11.

(d) Positive precession. K_3^2 between 1 and 4, Fig. 9; line four, Fig. 11.

(e) Higher negative precession. K_3^2 above 4, Fig. 9; lines one and seven, Fig. 11.

The mode shapes of the other systems are not too difficult to visualize, once those of the two systems described are understood.

Investigations of the Flow in Curved Ducts at Large Reynolds Numbers¹

W. E. TRUMPLER.² The paper is very instructive in conveying the exact nature of flow in curved passages. Such presentations are of great help to engineers in hydraulic machines, where flow losses generally are lumped together in a percentage and little is known of its real nature. It would be of further advantage if such an investigation could be extended to curved chan-

¹ By J. R. Weske, published in the December, 1948, issue of the JOURNAL OF APPLIED MECHANICS, Trans. ASME, vol. 70, pp. 344-348.

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nels in rotating elements, such as centrifugal-pump or compressor wheels.

AUTHOR'S CLOSURE

Certain aspects of secondary flows in rotor wheels of turbomachines have been studied by the author and a paper, "Secondary Flows in Rotating Passages at High Reynolds Numbers" presented at the VII Congress of Applied Mechanics in London, England, in September, 1948, which will be published in the Proceedings of that Congress.

Theory of the Damped Dynamic Vibration Absorber for Inertial Disturbances¹

C. F. GARLAND² AND F. M. SAUER.³ The results of a similar analysis of the dynamical vibration absorber, together with experimental data, are included in a paper by the writers.⁴ A comparison of the writers' analysis with that of the author indicates a discrepancy in the expressions for the optimum damping in the "Lancaster-type" absorber. It is believed that the author's Equation [34b] is incorrect and that the optimum damping for this case should be

$$h_{opt}^2 = \frac{1}{2(2 + \mu)}$$

The author's Equation [34b] leads to a corresponding distortion of curve 3, Fig. 6 of the paper. It is noted that curve 1 in Fig. 6, is not in agreement with Equation [34].

AUTHOR'S CLOSURE

Professor Garland and Mr. Sauer give the correct form of Equation [34b] and note that curves 1 and 3 of Fig. 6 are not consistent with the correct formulas [34] and [34b] which they are supposed to represent. I am grateful to them for correcting the record.

Also the author would like to point out that the expression $\pi c \omega \xi^*$ appearing in Equation [45] of the paper and two lines earlier should read $\pi c \omega \xi^{*2}$. This oversight does not affect later results.

¹ By J. E. Brock, published in the March, 1949, issue of the JOURNAL OF APPLIED MECHANICS, Trans. ASME, vol. 71, pp. 86-92.

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⁴ "Performance of the Viscously Damped Vibration Absorber Applied to Systems Having Frequency-Squared Excitation," by C. F. Garland and F. M. Sauer, published in this issue of the JOURNAL OF APPLIED MECHANICS, pp. 109-116.