

BIBLIOGRAPHY OF SURFACES AND TWISTED CURVES.

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THE following article gives a brief sketch of a bibliography of surfaces and twisted curves, prepared by the writer, and contains some miscellaneous notes pertaining to the general subject. It comprises for the most part extracts from a paper read before the AMERICAN MATHEMATICAL SOCIETY at its last May meeting.

The bibliography is intended to represent a compilation and classification, as complete as possible (with certain exceptions), of all articles upon surfaces and twisted curves published during the present century. The exceptions noted above are the general discussion of quadric surfaces and sphero-conics and the complete consideration of line geometry. References to papers upon the curvature, lines of curvature, geodesics, umbilics, and general surface curves of quadric surfaces have been included and classified; but, otherwise, articles upon the subjects whose exclusion has been mentioned are listed only incidentally.

The bibliography is indexed, subject to revision, as follows: 1. Surfaces in general. 2. Curvature of surfaces; (a) of quadrics, (b) in general. 3. Lines of curvature; (a) upon quadrics, (b) in general. 4. Geodesics; (a) upon quadrics, (b) in general. 5. Surfaces curves; (a) upon quadrics, (b) in general. 6. Umbilics. 7. Contact of surfaces. 8. Curvilinear coördinates. 9. Algebraic surfaces. 10. Cubic surfaces. 11. Quartic surfaces; (a) in general, (b) the wave surface, (c) the torus, (d) the cyclide, (e) Kummer's surface, (f) Steiner's surface, (g) the surface of elasticity. 12. Surfaces of the fifth and higher orders; (a) quintic surfaces, (b) sextic surfaces, (c) septic surfaces, (d) octic surfaces, (e) 9-thic surfaces, (f) 10-thic surfaces, (g) 12-thic surfaces. 13. Surfaces of revolution. 14. Orthogonal surfaces. 15. Envelopes. 16. Reciprocal surfaces. 17. Minimal surfaces. 18. Ruled surfaces; (a) in general, (b) scrolls, (c) torses. 19. Surfaces defined by curvature; (a) surfaces of constant curvature, (b) surfaces with plane lines of curvature, (c) surfaces with spherical lines of curvature, (d) other special forms. 20. Special forms of surfaces; (a) applicable, (b) helicoidal, (c) isothermal, (d) parallel, (e) normal, (f) polar, (g) pseudo, (h) pedal, (j) cyclic, (k) flexible and inextensible, (l) derived, (m) focal,