SUBJECT INDEX TO THE PAGES OF THIS VOLUME.

- Abelian functions, 236, 600, see Inversion; integrals, see Integrals; matrix, 669.
- Abel's theorem, 207, ff.; statement of, 210, 214; proof of, 213; number of independent equations given by, 222 ff.; for radical functions, 377; for factorial functions, 397; for curves in space, 231; Abel's proof of, 219, 220; converse of, 222.

Abel's differential equations, 225, ff.

- Addition equation for hyperelliptic theta functions, deduced algebraically, 331, ff.; for theta functions in general, 457— 461, 472, 476, 481, 513, 521.
- Adjoint polynomial (or curve), definition of, 121; number of terms in, 128; expression of rational function by, 127; see Integrals, Sets, Lots.
- Argument and parameter, interchange of, 16, 185, 187, 189, 191, 194, 206.
- Associated: Forms associated with fundamental integral functions, 62; integrals of second kind associated with integrals of the first kind, 193, 195, 198, 532; associated system of factorial functions, 397
- Automorphic functions, simple case of, 352, ff.; connection with factorial functions, 439, ff.
- Azygetic characteristics, 487, 497; transformation of, 542, 547; see Characteristics.
- Bacharach's modification of Cayley's theorem for plane curves, 141.

Biquadratic, see Göpel.

Birational transformation of a Riemann surface: does not affect the theory, 3, 7; number of invariants in, 9, 144, 148, 150; of plane curves, 11; by ϕ -polynomials, 142—152; for hyperelliptic surface, 152, 85; when p=1, or 0, 153; of surface into itself, 653. See Invariants, and Curves.

Bitangents of a plane curve, 381—390; 644, 646. Branch places, see Places.

- Canonical equation for a Riemann surface, 83, 91, 103, 143, 145, 152; curve discussed by Klein, 159; integral of the third kind, 168, 185, 189, 194, 195.
- Cayley's theorem for plane curves, 141.
- Characteristics: of a theta function, number of odd and even, 251; expression of any half-integer characteristic by means of a fundamental system, 301, 487, 500, 502; Weirstrass's number notation for, 570, 337, 303; tables of half-integer characteristics for p=2, p=3, 303, 305; syzygetic, azygetic, 487; period characteristics and theta characteristics, 543, 564; of radical functions, 380, 564; Göpel groups and systems of, 489, 490, 494, ff.; general theory of, 486, ff.; transformation of, 536, 542, 547, 564, 568.

Coincidences of a correspondence, 645.

Column and row. See Matrices.

- Column of periods, 571.
- **Complex** multiplication of theta functions, 629, ff., 639, 660.
- **Composition** of transformations of theta functions, 551.
- Condition of dimensions, 49.
- Conformal representation, 343, 356, 372.
- Congruence, meanings of sign of, 236, 256, 261, 264, 487.
- Constants, invariant in rational transformation, 9, 88, 144, 148, 150; in linear transformation of theta functions, 555— 559; in any transformation of theta functions, 620, 622.
- Contact curves, see Curves, and Radical.