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A BIBLIOGRAPHY OF WILLIAM BURNSIDE (1852-1927)

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In his obituary notice on Burnside (Proc. Royal Soc. 117 A (1928) xi-xxv; variants of this obituary also appeared in the Journal of the London Mathematical Society and the Dictionary of National Biography), A. R. Forsyth says almost nothing about his work on group theory and gives no bibliography. The latter defect we have endeavoured to remedy. All but six of the references were reviewed in the *Jahrbuch der Fortschritte der Mathematik*.

JOURNAL ABBREVIATIONS

AM	*Acta Mathematica*
JD	*Jahresbericht der Deutschen Mathematiker - Vereinigung*
MA	*Mathematische Annalen*
MM	*Messenger of Mathematics*
N	*Nature*
PC	*Proceedings of the Cambridge Philosophical Society*
PE	*Proceedings of the Royal Society of Edinburgh*
PL	*Proceedings of the London Mathematical Society*
PM	*Philosophical Magazine*
PR	*Proceedings of the Royal Society*
QJ	*Quarterly Journal of Mathematics*
TC	*Transactions of the Cambridge Philosophical Society*
TE	*Transactions of the Royal Society of Edinburgh*

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1883a	The elliptic functions of 1/3K, & C.	MM 12, 154-157.
b	Note on centre of pressure of a plane polygon.	MM 12, 180-181.
1884a	On certain spherical harmonics.	MM 14, 122-126.
1887a	On the trisection of the periods for Weierstrass's elliptic functions.	MM 16, 177-180.
b	Partition of energy between the translatory and rotational motions of a set of non-homogeneous elastic spheres.	TE 33, 501-507.
1888a	On a simplified proof of Maxwell's theorem.	PE 15, 106-108.
b	Note on the potential of an elliptic cylinder.	MM 18, 84-88.
c	On deep-water waves resulting from a limited original disturbance.	PL 20, 22-38.
1889a	On the small wave-motions of a heterogeneous fluid under gravity.	PL 20, 392-397.
b	Mathematical notes 1: geometrical interpretation of a condition of integrability.	MM 19, 96-97.
c	Mathematical notes 2: propagation of energy in the electro-magnetic field.	MM 19, 98
d	The lines of zero length on a surface as curvilinear coordinates.	MM 19, 99-104.
e	On the resultant of two finite displacements of a rigid body.	MM 19, 104-108.
1890a	On the differential equation of confocal spheroconics.	MM 20, 60-63.
b	On the surfaces whose lines of curvature are all plane.	MM 20, 49-54; 148.
c	On a property of plane isothermal curves.	MM 20, 64-68.
d	Note on a paper relating to the theory of functions.	PC 7, 126-128.
1891a	On a case of streaming motion.	MM 20, 144-145.
b	Note on the addition theorem for hypherbolic functions.	MM 20, 145-148.
1891c	On a property of linear substitutions.	MM 20, 163-166.
d	On functions determined from their discontinuities and a certain form of boundary condition.	PL 22, 346-358.
e	On a certain Riemann's surface.	PL 22, 410-416.
f	On the form of closed curves of the third class.	MM 21, 25-26.
g	Algebraical notes 1: on the Jacobian of two quadratics. 2: on a system of simultaneous equations.	MM 21, 26-28.
h	Two notes on Weierstrass's P(u) 1: forms of the addition equation. 2: on P(u) considered as a covariant of a quartic.	MM 21, 84-87.
k	On a class of automorphic functions.	PL 23, 49-88.
1892a	On the form of hyperelliptic integrals of the first order, which are expressible as the sum of two elliptic integrals.	PL 23, 173-185.
b	On the application of Abel's theorem to elliptic integrals of the first kind.	MM 21, 164-170.
c	On the linear transformation of the elliptic differential.	MM 21, 170-176.
d	Discussion on partition of energy.	N 45, 533.
e	Further note on automorphic functions.	PL 23, 281-295.
f	Note on pseudo-elliptic integrals.	MM 22, 83-89.
g	On the division of the periods of elliptic functions by 9.	MM 22, 89-96.
h	Note on the equation $y^2 = x(x^4 - 1)$	PL 24, 17-20.
1893a	On a problem of conformal representation.	PL 24, 187-206.
b	Note on linear substitutions.	MM 22, 190-192.
c	On the finite displacement of a rigid body.	MM 23, 19-22.
d	Note on functions of a real variable.	MM 23, 39-42.
e	Note on the theory of groups.	MM 23, 50-56.
f	On the curve of intersection of two quadrics.	MM 23, 89-91.

1893g	Notes on the theory of groups of finite order.	PL 25, 9-18.
h	On a property of certain determinants.	MM 23, 112-114.
1894a	On Green's function for a system of non-intersecting spheres.	PL 25, 94-101.
b	On an application of the theory of groups to Kirkman's problem.	MM 23, 137-143.
c	On a class of groups defined by congruences.	PL 25, 113-139.
d	On a system of linear congruences.	MM 24, 51-58.
e	On certain composite groups.	MM 24, 82-96.
f	On the kinematics of non-Euclidean space.	PL 26, 33-56.
g	Note on ternary substitutions of determinant unity with integral coefficients.	MM 24, 109-112.
h	On a class of groups defined by congruences (2nd paper).	PL 26, 58-106.
1895a	Notes on the theory of groups of finite order.	PL 26, 191-214.
b	Correction to a former note (1893e).	MM 24, 191-192.
c	Notes on the theory of groups of finite order (continued).	PL 26, 325-338.
d	On two theorems in elementary kinematics.	MM 25, 74-76.
1896a	On doubly-transitive groups of degree n and order n(n-1).	MM 25, 147-153.
b	On the isomorphism of a group with itself.	PL 27, 354-367.
c	On doubly transitive groups of degree 2^m and order $2^m(2^m - 1)$.	MM 25, 187-189.
d	Note on the symmetric group.	PL 28, 119-129.
1897a	Theory of Groups of Finite Order (1st Edition).	Cambridge U.P.
b	The construction of the straight line joining two given points.	PL 29, 125-132.
1898a	On the continuous group that is defined by any given group of finite order.	PL 29, 207-224. 546-565.
b	On plane equipotential surfaces.	MM 27, 138-146.
c	On linear homogeneous continuous groups whose operations are permutable.	PL 29, 325-352.
d	Note on the simple group of order 504.	MA 52, 174-176.
e	The trigonometry of a rectangular gauche hexagon.	MM 28, 92-96.
f	On the representation of a group of finite order as a substitution group.	MM 28, 102-103.
g	On the cononical form of a linear substitution of finite order.	MM 28, 111-114.
h	Correction to the paper on the representation of a group of finite order as a substitution group.	MM 28, 115.
1899a	On the reduction of a linear substitution to its canonical form.	PL 30, 180-194.
b	Sketch of the late Prof. Sophus Lie's mathematical work.	PL 30, 334-336.
c	Discussion on Theory of Functions.	N 39, 533-534.
d	On a class of groups of finite order.	TC 18, 269-276.
1900a	On transitive groups of degree n and class n-1.	PL 32, 240-246.
b	On group-characteristics.	PL 33, 146-162.
c	On some properties of groups of odd order.	PL 33, 162-185. 257-268.
d	On cyclotomic trisection.	MM 30, 101-102.
1901a	Note on the symmetric group.	MM 30, 148-153.
b	On the composition of group-characteristics.	PL 34, 41-48.
c	On the general projective transformation.	MM 30, 171-173.
d	Two notes on the projective invariants of systems of points.	MM 30, 177-185.
e	On groups which contain 1+2p or 1+4p subgroups of order P^α.	MM 31, 77-81.
f	On the representation of a group of finite order as a permutation group, and on the composition of permutation groups.	PL 34, 159-168.

1901g	On the lines of curvature of inverse surfaces.	MM 31, 97; 192.
h	On the characteristic equations of certain linear substitutions.	QJ 33, 80-84.
1902a	On the roots of the Hessian of a binary quartic.	MM 31, 128-132.
b	On groups in which every two conjugate operations are permutable.	PL 35, 28-37.
c	On an unsettled question in the theory of discontinuous groups.	QJ 33, 230-238.
d	On soluble groups of linear substitutions.	QJ 33, 242-244.
e	On the four rotations which displace one orthogonal system of axes into another.	AM 25, 291-295.
f	On groups which are linear and homogeneous in both variables and parameters.	PL 35, 206-220.
1903a	On soluble irreducible groups of linear substitutions in a prime number of variables.	AM 27, 217-224.
b	On an arithmetical theorem connected with roots of unity, and its application to group-characteristics.	PL(2) 1, 112-116.
c	On composite inversion and allied transformations.	MM 32, 147-159.
d	On the representation of a group of finite order as irreducible group of linear substitutions and the direct establishment of the relations between the group-characteristics.	PL(2) 1, 117-123.
e	On reciprocal linear homogeneous groups.	QJ 34, 230-232.
f	On groups which admit certain isomorphisms.	MM 33, 124-126.
g	On the coordinates of the eighth point common to a system of quadrics through seven given points.	MM 33, 127-128.
1904a	On groups of order $p^{\alpha}q^{\beta}$.	PL(2) 1, 388-392.
b	On linear substitutions of determinant unity with integral coefficients.	MM 33, 133-137.
c	On the reduction of a group of homogeneous linear substitutions of finite order.	AM 28, 369-387.
d	On groups of order $p^{\alpha}q^{\beta}$ (second paper).	PL(2) 2, 432-437.
1905a	On the complete reduction of any transitive permutation-group; and on the arithmetical nature of the coefficients in its irreducible components.	PL(2) 3, 239-252.
b	On the condition of reducibility of any group of linear substitutions.	PL(2) 3, 430-434.
c	On criteria for the finiteness of the order of a group of linear substitutions.	PL(2) 3, 435-440.
d	On finite groups in which all the Sylow subgroups are cyclical.	MM 35, 46-50.
e	On a general property of finite irreducible groups of linear substitutions.	MM 35, 51-55.
f	On the arithmetical nature of the coefficients in a group of linear substitutions of finite order (second paper).	PL(2) 4, 1-9.
g	On the Hessian configuration and its connection with the group of 360 plane collineations.	PL(2) 4, 54-71.
1906a	On the simple group of order 25920.	PR(A) 77, 182-210.
b	On the figure consisting of a regular pentagon and the line at infinity.	MM 35, 190-192.
c	On simply transitive groups of prime targets.	QJ 37, 215-221.
1908a	The alternating functions of three and of four variables.	MM 37, 165-166.
b	An approximate quadrature formula.	MM 37, 166-167.
c	On the theory of groups of finite order (Presidential address).	PL(2) 7, 1-7.
d	On the arithmetical nature of the coefficients in a group of linear substitutions (third paper).	PL(2) 7, 8-13.
1909a	On a configuration of twenty-seven hyper-planes in four-dimensional space.	PC 15, 71-75.

1909b	On the group of the twenty-seven lines of a cubic surface.	QJ 40, 246-250.
1910a	On the representation of a group of finite order as a group of linear substitutions with rational coefficients.	PL(2) 8, 321-329.
b	On double-sixes.	PC 15, 428-430.
c	On the coefficients in groups of linear substitutions of finite order.	QJ 41, 219-220.
d	The most general metabelian group of finite order with two generators.	QJ 41, 223-226.
e	Groups, Theory of. Encyclopaedia Britannica, Vol. 12 pp. 626-636. 11th Edition, 1910-11.	
1911a	Theory of Groups of Finite Order (2nd Edition).	Cambridge U.P.
b	The determination of all groups of rational linear substitutions of finite order which contain the symmetric group in the variables.	PL(2) 10, 284-308.
c	The condition that an irreducible group of linear substitutions on n variables of finite order may contain a substitution with n-1 unit multipliers.	JD 20, 259-261.
d	On the outer automorphisms of a group.	PL(2) 11, 40-42.
e	On the double-six which admits a group of 120 collineations into itself.	PC 16, 418-420.
1912a	On some properties of groups whose orders are powers of primes.	PL(2) 11, 225-245.
b	On groups of linear substitutions of finite order which possess quadratic invariants.	PL(2) 12, 89-93.
1913a	On some properties of groups whose orders are powers of primes (second paper).	PL(2) 13, 6-12.
1914a	On the rational solutions of the equation in quadratic fields.	PL(2) 14, 1-4.
b	On the rational determination of a plane quartic from seven given bitangents.	MM 44, 21-23.
c	An elementary proof of a property of groups of finite order.	MM 44, 53-57.
d	On a configuration of 21 points and 21 lines which arises from the complete quadrilateral and determines the group of 168 plane collineations.	PL(2) 14, 106-110.
e	On the modification of a train of waves as it advances into shallow water.	PL(2) 14, 131-133.
f	On cyclotomic quinquisection.	PL(2) 14, 251-259.
1915a	On periodic irrotational waves at the surface of deep water.	PL(2) 15, 26-30.
b	On the steady motion of fluid under gravity.	MM 45, 43-46.
1916a	Determinants of cyclically repeated arrays.	MM 45, 183-185.
b	On the efficiency of a surface of pressure discontinuity regarded as a propeller.	PL(2) 17, 42-53.
1917a	A rapidly convergent series for log N!	MM 46, 157-159.
b	An approximate expression for $\sum_{n=0}^{\infty} \frac{1}{(m+n)^r}$.	MM 46, 159-171.
c	An expression for the remainder in the expansion of a function in a series of positive integral powers of the variables.	MM 46, 172-175.
d	On rational approximations to log x.	MM 47, 79-80.
1918a	On a plane configuration of points and lines connected with the group of 168 plane collineations.	MM 48, 33-34.
b	On the probable regularity of a random distribution of points.	MM 48, 47-48.
1919a	On certain plane configurations of points and lines.	MM 49, 41-43.
b	A property of groups of even order.	MM 49, 43.
c	On a property of algebraic numbers.	MM 49, 127-128.

1920a	On cyclical octosection.	TC 22, 405-411.
b	On the representation of the simple group of order 660 as a group of linear substitutions on 5 symbols.	PC 20, 247-249.
1921a	Convex solids in higher space.	PC 20, 437-441.
b	On certain simply-transitive permutation-groups.	PC 20, 482-484.
1923a	On errors of observation.	PC 21, 482-487.
b	On rational approximations to cyclical cubic irrationalities.	MM 52, 158-160.
c	The solution of a certain partial difference equation.	PC 21, 488-491.
d	On a spherical configuration of eight points.	MM 52, 181-184.
e	On the formulae of one-dimensional kinematics.	PC 21, 757-762.
f	On errors of observation.	PC 22, 26-27.
1924a	On an integral connected with the theory of probability.	MM 53, 142-144.
b	On a partial linear difference equation.	MM 53, 161-165.
c	On the polygons inscribed in one conic and circumscribed to another.	PC 22, 163-166.
d	The problems of random flight and conduction of heat.	PC 22, 167-168.
1925a	On the phrase "equally probable".	PC 22, 669-671.
b	On the relation connecting the 10 distances between 5 points in space.	MM 54, 157-158.
c	On the approximate sum of selected terms from the multilinear expansion.	MM 54, 189-192.
d	On the idea of frequency.	PC 22, 726-727.
e	On the representation of the modular group of order $1/2P(P^2-1)$ as a group of linear substitutions on $1/2P(P-1)$ symbols, when P is a prime of the form $4n+3$.	PC 22, 779-787.
f	On groups of linear substitutions which contain irreducible metacyclical subgroups.	PC 22, 788-792.
1926a	On a group of 1440 birational transformations of four variables that arises in considering the projective equivalence of double sixes.	PC 23, 103-108.
b	On the "hypothetical infinite population" of theoretical statistics.	PM(7) 1, 670-674.
c	On a group of order 25920 and the projective transformations of a cubic surface.	PC 23, 498-499.
1928a	Theory of Probability.	Cambridge U.P.