

destruction of the wood as is 40 per cent. loss at 60 per cent. or 80 per cent. moisture content.

The maximum moisture content at which decay can take place in any of our commercial woods is about 190 per cent. or 200 per cent. Beyond that point, the water drives out so much of the air that insufficient is left to support growth of these wood destroyers.

The relation of this problem to specific gravity is obvious, of course. Presupposing that a certain definite volume of air is necessary to support the growth of these wood destroyers, the moisture content favoring the maximum amount of decay or inhibiting decay entirely will vary inversely with the specific gravity. The incomplete series show that satisfactorily. With woods of three specific gravities, there have been obtained three points for both the limit of optimum decay and the inhibition point in terms of percentage of water. It can not of course be determined as yet whether these points form a straight line on the graph or are on a parabolic curve. Tests are now in progress not only to fill the gaps existing in the present series, but also to obtain two more points in the graph by growing certain of the fungi upon southern yellow pine of specific gravities .65 and .75. Whether these points will then form a straight line or a curve, it is expected to be able to prove that the durability of some of our heavy woods, like white oak and best southern pine, etc., is not due to tannin, resin or anything more than its high specific gravity—i.e., its small lumina, and hence small amount of air available for fungous growth.

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THE AMERICAN MATHEMATICAL SOCIETY

THE thirty-first summer meeting and tenth colloquium of the American Mathematical Society were held at Cornell University, from September 8 to 12, 1925, in connection with the meeting of the Mathematical Association of America. The attendance included one hundred and forty-nine members of the society, a record for a summer meeting.

The attending mathematicians and their guests were very hospitably entertained at Sage College, on the beautiful university campus. Many enjoyable social events were arranged by the mathematics department of the university, including a reception at which President Farrand welcomed the visitors. The joint

dinner of the two mathematical organizations, with Professor H. E. Slaught as toastmaster, was attended by one hundred and eighty-five persons. A hearty vote of thanks was passed to the local members of the committee on arrangements, Professors Tanner, Gillespie and Hurwitz.

The secretary reported the appointment of the following committee on nominations of officers and members of the council and board of trustees for 1926: W. B. Ford, Robert Henderson, D. N. Lehmer, E. J. Townsend and Oswald Veblen (chairman). Professor Harris Hancock was appointed to represent the society at the celebration of the semi-centennial of Vanderbilt University. The council adopted a resolution of thanks to the assistant secretary, Professor Arnold Dresden, for his able and devoted service in carrying on the additional duties of the secretary during the six months' absence of the latter in Europe.

It was announced that the next volume of the *Bulletin of the American Mathematical Society* will be printed by the George Banta Publishing Company, at Menasha, Wisconsin.

Invitations from Hunter College for the next annual meeting, from Ohio State University for the summer meeting of 1926 and from the University of Wisconsin for the summer meeting and colloquium in 1927 were accepted, with hearty thanks.

The colloquium speakers were Professors L. P. Eisenhart, of Princeton University, and Dunham Jackson, of the University of Minnesota. Each speaker delivered five lectures, which will be published by the society. The subjects were as follows:

Professor Eisenhart: *The new differential geometry*. (I) Riemannian geometry; (II) Linear connection of a space; (III) Geometry of paths; (IV) Geometry of a sub-space of a linearly connected space.

Professor Jackson: *The theory of approximation*. (I) The approximate representation of continuous functions; (II) Discontinuous functions and functions of limited variation; (III) The principle of least squares and its generalizations; (IV) Interpolation; (V) The geometry of function space.

The following papers were read at the regular sessions of the society:

Space involutions having a web of invariant rational surfaces: F. R. SHARPE.

Note on six points in a plane and the six conics determined by them: W. B. CARVER.

On the reality of singularities of plane curves: T. R. HOLLCROFT.

Self-projective plane 5-points: LOUIS WEISNER.

Plane cubic curves in the Galois fields of order 2ⁿ: A. D. CAMPBELL.

Generalization of certain theorems of Bohl. Second paper: F. H. MURRAY.

- Ricci notation for geometrical products:* C. L. E. MOORE.
- Projection of a fixed vector on a surface:* G. Y. RAINICH.
- Mass in curved space-time:* G. Y. RAINICH.
- Mutually consistent regression surfaces for three-dimensional frequency solids:* B. H. CAMP.
- New properties of an orthocentric system of triangles:* A. A. BENNETT.
- Solutions of the Einstein equations for empty space:* H. W. BRINKMANN.
- Einsteinian 4-spaces imbedded in euclidean 5-space:* H. W. BRINKMANN.
- Riemann spaces of class one:* H. W. BRINKMANN.
- The torsion of a Riemannian n -space imbedded in a euclidean m -space ($m \leq n+2$):* H. W. BRINKMANN.
- Solution of the problem of the thick rectangular plate with two opposite edges supported and two edges free, and under uniform or central load:* C. A. GARABEDIAN.
- Rectangular plates of constant or variable thickness:* C. A. GARABEDIAN.
- A generalization of the tetrahedral complex in odd S_{n-1} . Preliminary report:* J. A. EIESLAND.
- The loci of point singularities on a generalized Kummer surface in odd S_{n-1} :* J. A. EIESLAND.
- Note on rational plane cubics:* C. A. NELSON.
- A projective theory of affinely connected manifolds:* T. Y. THOMAS.
- A study of the conformal mapping $w = az + b/z + c/z^2$ and its application to aerodynamics:* F. D. MURNAGHAN.
- On the use of fractions in the algebra of logic:* A. D. CAMPBELL.
- Concerning the relation between separability and the proposition that every uncountable point set has a limit point:* R. L. MOORE.
- Concerning the separation of point sets by curves:* R. L. MOORE.
- The double elliptic case of the Lie-Riemann-Helmholtz problem of the foundations of geometry:* R. G. LUBBEN.
- Concerning limiting sets:* R. G. LUBBEN.
- Surrounding theorems with applications to questions of accessibility:* R. G. LUBBEN.
- Taylor's theorem in general analysis:* L. M. GRAVES.
- On the oscillation of a continuum:* W. A. WILSON.
- Some properties of a continuum limited and irreducible between two points:* W. A. WILSON.
- A proof of Weierstrass's theorem, with applications to Dirichlet's principle:* E. R. HEDRICK and M. B. PORTER.
- On a generalization of Gibbs' phenomenon:* E. R. HEDRICK and M. B. PORTER.
- A problem in the calculus of variations with an infinite number of auxiliary conditions:* R. G. D. RICHARDSON.
- On convergence factors in multiple series:* C. N. MOORE.
- Relations between the singular points of n ordinary differential equations of the first order:* MARSTON MORSE.
- A class of reciprocal functions:* EINAR HILLE.
- Boundary problems and expansion theorems in the theory of integro-differential equations:* JACQUES TAMARKIN.
- Second law of the mean in the theory of definite integrals:* JACQUES TAMARKIN and C. E. WILDER.
- On a general formula in the theory of Tchebycheff's polynomials and its applications:* J. A. SHOHAT.
- Note on a fundamental theorem concerning the limit of a sum:* H. J. ETTLINGER.
- On the conditions of integrability of covariant differential equations:* J. A. SCHOUTEN.
- The fundamental region for a Fuchsian group:* L. R. FORD.
- On the form of the solid of revolution of minimum resistance when the normal resistance varies as the n th power ($n > 0$) of the normal velocity:* R. P. AGNEW.
- Some properties of bounded polynomials in several variables:* O. D. KELLOGG.
- Simplification of a general method of summability of divergent series:* L. L. SMAIL.
- Multiply transitive substitution groups:* G. A. MILLER.
- A program on ordinary differential parameters. Preliminary report:* O. E. GLENN.
- Groups in which the normalizer of every element is abelian:* LOUIS WEISNER.
- On the formal modular invariants of binary forms:* W. L. G. WILLIAMS.
- Application of the theory of relative cyclic fields to both cases of Fermat's last theorem:* H. S. VANDIVER.
- On algorithms for the solution of the quadratic congruence:* H. S. VANDIVER.
- Laws of reciprocity and the first case of Fermat's last theorem:* H. S. VANDIVER.
- A new theory of the representation of integers as definite quadratic forms:* H. S. VANDIVER.
- Note on the condition that a cubic equation have an integral root:* H. S. VANDIVER.
- Definite linear dependence:* L. L. DINES.
- On certain symmetric sums of determinants:* L. L. DINES.
- Proof that large primes have four consecutive quadratic residues:* A. A. BENNETT.
- The algebraic structure of the formulas in plane trigonometry. Second paper:* T. H. GRONWALL.
- An algebra of sequences of functions:* E. T. BELL.

The next meeting of the society will be in New York City on October 31; the San Francisco section will also meet at Berkeley on the same date. The western Christmas meeting will be held at Kansas City, in conjunction with the meetings of the Southwestern Section and with the American Association for the Advancement of Science. The annual meeting will be held at Hunter College, New York City, on January 1 and 2, 1926.

R. G. D. RICHARDSON,
Secretary.

BROWN UNIVERSITY