INVENTORY

Series I. Biographical Files, 1937-38, 1968-1999, 2001, n.d.

Box 1

> Biographical Files, 1937-38, 1968-99, 2001, n.d. (4f)

Series II. Correspondence Files, 1944-2004, n.d.

> **Subseries 1. Correspondence with Former Students and Colleagues, 1958-2004, n.d.**

Box 1 (cont.)

> Anderson, David L., 1986
> Cheney, Margaret, 1997
> Colley, Susan, 1990-2004
> Dye, Nancy, 1997
> Goldberg, Sam, 1985-1988
> Holladay, Larry, 1978-1979
> Miscellaneous Correspondence w/ Students, 1960-1992, (5f)
> Molnar, Peter, 1969-1996
> Moyer, Albert, 1968-1997
> Oberlin College Library (Eric Carpenter), 1991
> Oberlin Review, 1960-1975, n.d.
> Renfrow, William, 1994-1996, n.d.
> Scofield, John, 2003
> Spear, Athena Tacha, 1973, n.d.
> Starr, S. Frederick, 1983, 1986, 1990 (restricted)
> Subcommittee on Writing, 1982
> Vance, E.P., 1958-59

> **Subseries 2. Correspondence over Principia Controversy, 1979-1991**

Box 2

> Bork/Principia, 1979-1982
> Comment, 1983
> Principia/American Journal of Physics, 1981-1982, 1987, 1991
> Principia: Solid Sphere, 1983-1985

Series II. Correspondence Files, 1944-2004 (cont.)

Subseries 3. Correspondence with Others in the Field, 1944-2004, n.d.

Box 3

      Name Files (A-Z)
            American Journal of Physics, 1964-1974
            Anicin, Bozidar, 1987-1992
            Biswas, T. and Edward Kiess, 1988-1989
            Bohan, Bill, 1991-1997
            Clark, Clifton Bob 1964-1997
            Cohen, Bernard, 1980-2001
            Cornell, David, 1992-2004
            Cushing, James, 1980-2001
            Dalitz, Richard, 1997-2000, n.d.
            Drake, Ellen, 1992-2003
            Flynn, John 1968, 1971, 1979
            Gardner, Martin, 1974
            Gjertsen, Derek, 1983-2001

Box 4

            Greenberg, John, 1980-2004 (2f)
            Greenler, Robert, 1976, 1985, 1992, 2003
            Griffiths, Graham, 1997, n.d.
            Journal of American Physics, 1968
            Leff, Harvey, 1997-2001
            Macklin, Philip, 1984-1992
            MacMilllan Publishing Company, 1994
            Mallinckrodt, John, 1996-2002

Box 5

            Miscellaneous correspondence, 1957-1994, n.d. (11f)

Box 6

            Oxford University Press, 1967-1969
            Pappas, Richard, 1984
            The Physics Teacher, 1992, n.d.
            Pourciau, Bruce, 1990-1999

Series II. Correspondence Files, 1944-2004 (cont.)

Subseries 3. Correspondence with Others in the Field (cont.)

Box 6 (cont.)

Rainwaiter, James C., 1976-1996
Rayner, Margaret (I.B.), 1977-1979
Romer, Robert H., 1982-2000 (2f)
Sokal, Alan, 1996, n.d.
Swartz, Cliff, 1979-2004

Box 7

Taylor, 1973-2004

Topic Files (A-Z)

American Monthly Magazine: Monthly Problem Solution, 1976
Baierlein, 1944, 1978-1979, 1989
Basic Ed Mitchell, 1980
Boyle's Law, Gas, 1961-1963
Brewster's Law, Huygen's Principle, 1962, 1965
"Calculus of Variations," 1973-2003
Commission on College Physics Monograph Review, 1966-1967
Dalomp, 1995-96, n.d.
Disturbprop on One-Dimensional Lattice, 1970
Dover Reviews, 1977-1991
Ewing, John, American Mathematical Monthly, 1992
Feyman "Proof," 1997-2003
"Gibb's Paradox," n.d.
Harmonic Oscillator, 1961-1962

Box 8

Hauser-Lang, 2003-2004, n.d.
Heat Capacity of an Ideal Free-Electron Gas, 1969-1970, 1996
Heisenberg Inner Exile, 1984
Hooke, Robert, 1954-2003, n.d.
Human Discharge Chain, 1999-2000
Jerk Reaction, 1990
Jones and Bliss, 1977
Leibniz Rule, 1975-1980

Series II. Correspondence Files, 1944-2004 (cont.)

    Subseries 3. Correspondence with Others in the Field (cont.)

Box 8 (cont.)
        Topic Files (A-Z) (cont.)
           "Long Buried Dismantling of a Centuries-old Myth"
                (Rosenberger), 1988-90
           Mathematics Magazine, 1978
           Math Reprint Requests, 1954-1963
           Michels, Walter—Foundation of Physics, 1968-1969
           Mitvalsky, 1966-1967
           Monthly Problems, 1957-2003
           Motz Criticism, 1975-1977
           Novel Method for Solving a Class of Differential Equations,
                1988-1991
           Ohio Section of American Physical Society, Nominating Committee,
                1965-1967
           Particle on Spring Having Mass, 1978-1979
           Publications: Physics Series (i.e., Relativity), 1965-1967

Box 9

           Reproduction of Published-Work Controversy, 1975
           Romer, Halley, Twain, Newton, 1984-1985
           Sears Problem, 1966-71
           Special Relativity Without the Lorentz Transformation,
                1964
           Spring-Mass Correction (Rotation), 1963-1964, 1990
           Symmetry Discovered (Rosen), 1976
           Time Variation of a Vector Attached to a Moving Frame,
                1971, 1979-1980
           UR by SG, 1984, 1988
           Yes, What *Is* Happening to Calculus?, 1962-1968, 1982

Series III. Files relating to the Oberlin College Department of Physics, 1961-65, 1980-81, 1991, n.d.

Box 10

      Department, 1980-1981, 1991

      Oberlin College Physics Songbook, n.d.

      Physics Lecture Series, Oberlin College, 1961-1965

      Physics Library Books and Periodicals, incl. Heckert Fund, 1961-1964

Series IV. Grant Files, 1961-64

Box 11

      National Science Foundation Grant: Apparatus Grant, 1961-1964

      National Science Foundation Grant: Special Relativity and High Permeability
          Alloy Strips,1963

      National Science Foundation Grant: Student Research and Independent Study,
          1962

Series V. Talks and Speeches, 1962, 1964, 1971, 1994

Box 12

      "Two Kinds of Truth," Oberlin College Senior Assembly Address, 1962

      "An Elementary Approach to Special Relativity," Southern Methodist University,
          1964

      "A Case for Irrelevance," Annual Sigma Xi Initiation Banquet, 1971

      "Wherefrom Springeth the Monstrous Discrepancy?" Principia College, 1994

Series VI. Teaching and Fellowship Files, 1943, 1954-1990, n.d.

Box 13

      Classroom anecdotes, 1975, 1980, n.d.

      Elementary Optics, 1943

      Examinations, 1960-1963, 1967, 1980, n.d.

      Gradebooks and Class Lists, 1954-59, 1961-64, 1979-1990 (2f, restricted)

      Mathematics Competition, Notre Dame, 1958-59

      National Science Foundation Fellowship, 1964-1965

Series VI. Teaching and Fellowship Files (cont.)

Box 13 (cont.)
> National Science Foundation Fellowship, Oxford, 1966-1967
> Notebook, equations, n.d.
> Number Theory, 1983
> Problems in Number Theory, 1960
> Prospective Students: Interview Process, 1971-1985
> Sabbatical Leave in Oxford, England, 1971-1977 (3f)
> Spring, 1979-1981

Box 14
> Teaching Appointment, 1976-1977, 1986
> Teaching Appointments, Mathematics—Post Retirement, 1982-1989
> Transparencies and Cartoons, n.d.
> Weinstock Method, c. 1965
> William Lowell Putnam Mathematical Competition (blank), 1978
> Winter Term, 1964, 1976-1982, n.d.

Series VII. Topical Files, 1942, c. 1952, 1961-74, 1977-78, 1980-82, 1985, 1987-93, n.d.

Box 15
> American Association for the Advancement of Science, Program, 1970
> American Association of Physics Teachers Committee on Resource Letters, 1969-1972
> American Institute of Physics Visiting Scientist Program, 1967-1971
> American Physical Society Annual Meeting Program, 1942
> Ann Arbor Conference on Undergraduate Physics-Major Curriculum, 1962
> Antioch, 1968
> Astrology Class, 1985
> Cook List, 1980-1982
> Denver Conference on Undergraduate Physics—Major Curriculum, 1961
> Guest Lecture and Symposia Publicity, 1942, 1981-82, 1987, n.d.
> McGill Conference, 1977-1978
> McGraw-Hill Book Company, Inc., announcement, Robert Weinstock's *Calculus of Variations*, c. 1952
> Ohio Academy, 1973-1974

Series VII. Topical Files (cont.)

Box 15 (cont.)
    Ohio Academy of Science Visiting Scientists Program, 1961-1971 (3f)
    Petry/Hagel, 1987-1993
    St. Olaf, 1962
    University of Washington—Second Northwest Conference on Physics, 1963
    Vice of Verses, 1980-1982

Series VIII. Writings Files, 1942-2004 (span)

Subseries 1. Articles and Letters to the Editor (published), 1942-2004 (span)
    (Arranged chronologically in 5 folders)

Box 16

        (Reprints):
        Theory of the Continuous X-Ray Spectrum, reprinted from *The Physical Review*, Vol. 61, Nos. 9 and 10, pp. 584-590, May 1 and 15, 1942.

        Theory of the Continuous X-Ray Spectrum: Short Wave Limit, reprinted from *The Physical Review*, Vol. 64, Nos. 9 and 10, pp. 276-278, November 1 and 15, 1943.

        Inelastic Scattering of Slow Neutrons, reprinted from *The Physical Review*, Vol. 65, Nos. 1 and 2, pp. 1-20, January 1 and 15, 1944.

        Continuous X-Ray Spectrum: Note to Experimenters, reprinted from *The Physical Review*, Vol. 65, Nos. 3 and 4, p. 150, February 1 and 15, 1944.

        Inequalities for a Classical Eigenvalue Problem: Technical Report 37, Prepared Under Contract for the Office of Naval Research, Department of Mathematics, Stanford University, Stanford California, May 17, 1954.

        Inequalities for a Classical Eigenvalue Problem, reprinted for the *Journal of Rational Mechanics and Analysis*, Vol. 3, No. 6, pp. 745-53, November 1954.

Series VIII. Writings Files, 1942-2002, 2004 (cont.)

Subseries 1. Articles and Letters to the Editor (published) (cont.)

Box 16 (cont.)

On Continuous Differentiability, reprinted from the *American Mathematical Monthly*, Vol. LXIV, No. 7, August-September 1957

A Note on the Base of Natural Logarithms, reprinted from the *American Mathematical Monthly*, Vol. 67(4), April 1960.

Greatest Common Divisor of Several Integers and an Associated Linear Diophantine Equation, reprinted from the *American Mathematical Monthly*, Vol. 67(7), August-September 1960.

A Proof of the Euler-Fermat Theorem, reprinted from the *American Mathematical Monthly*, Vol. 68(3), March 1961.

Laws of Classical Motion: What's F*? What's* m*? What's* a*?*, reprinted from *American Journal of Physics*, Vol. 29(10), 698-702, October 1961.

An Unusual Method of Solving the Harmonic-Oscillator Equation, reprinted from American Journal of Physics, Vol. 29(12), pp. 830-831, December 1961.

Kepler's Third Law for Elliptical Orbits, reprinted from *American Journal of Physics*, Vol. 30(11), pp. 813-814, November 1962.

Yes, What Is *Happening to Calculus?* reprinted from *American Journal of Physics*, Vol. 31(2), pp. 108-112, February 1963.

Internal Energy and Specific Heats of a Boyle's-Law Gas, reprinted from *American Journal of Physics*, Vol. 31, No. 5, pp. 336-341, May 1963.

Kepler's Third Law "Without Calculus": Comments on a Note by Chapman, reprinted from *American Journal of Physics*, Vol. 31(9), p. 728, September 1963.

Series VIII. Writings Files, 1942-2002, 2004 (cont.)

   Subseries 1. Articles and Letters to the Editor (published) (cont.)

Box 16 (cont.)

Derivation of the Lorentz-Transformation Equations without a Linearity Assumption, reprinted from *American Journal of Physics*, Vol. 32(4), pp. 260-264, April 1964.

Spring-Mass Correction in Uniform Circular Motion, reprinted from *American Journal of Physics*, Vol. 32(5), pp. 370-76, May 1964.

Kepler's Third Law "without Calculus": a Reply to Professor Freeman, reprinted from *American Journal of Physics*, Vol. 32(8), pp. 644-45, August 1964.

New Approach to Special Relativity, reprinted from *American Journal of Physics*, Vol. 33(8), pp. 640-645, August 1965.

Honors List, Oberlin Class of 1965

Correspondence: On Introducing the Boltzmann Distribution, reprinted from *Contemporary Physics*, Vol. 17(3), p. 234, February 1966.

Entropy and Temperature in Equilibrium Statistical Mechanics, reprinted from *American Journal of Physics*, Vol. 35(7), pp. 566-573, July 1967.

New Approach to Statistical Mechanics, reprinted from *American Journal of Physics*, Vol. 35(8), pp. 710-727, August 1967.

Comment of "Special Relativity without the Postulate of Constancy of Light", reprinted from *American Journal of Physics*, Vol. 35(9), pp. 892-893, September 1967.

Heat Capacity of an Ideal Free-Election Gas: A Rigorous Derivation, reprinted from American Journal of Physics, Vol. 37(12), pp. 1273-1279, December 1969.

Correspondence with Greg Maurer, June 1970

Series VIII. Writings Files, 1942-2002, 2004 (cont.)

   Subseries 1. Articles and Letters to the Editor (published) (cont.)

Box 16 (cont.)

Propagation of a Longitudinal Disturbance on a One-Dimensional Lattice, reprinted from *American Journal of Physics*, Vol. 38(11), pp. 1289-1298, November 1970.

Normal-Mode Frequencies of Finite One-Dimensional Lattices with Single Mass Defect: Exact Solutions, reprinted from *American Journal of Physics*, Vol. 39(5), pp. 484-502, May 1971.

Inverse-Square Gravitation from Kepler's First Two Laws: Extension of a Macklin Idea, reprinted from *American Journal of Physics*, Vol. 40, pp. 357-358, February 1972.

Correspondence with Donna Wilkening, Aug 30, 1972

Faculty Report Annual Evaluation, January 1973

Correspondence with Joseph Palmieri, October 1973

Faculty Report Annual Evaluation, January 1975

Correspondence with Oberlin Student Honor Committee, January 23rd, 1975

Booker Peck Tenure Evaluation, March 1975

Correspondence with Robert Longsworth, October 1975

Satisfaction without Compensation, in *The Physics Teacher*, April 1975.

On a fallacious proof of Earnshaw's theorem, reprinted from *American Journal of Physics*, Vol. 44(4), pp. 392-393, April 1976.

Correspondence with James Lubetkin, May 1976

Series VIII. Writings Files, 1942-2004 (span) (cont.)

   Subseries 1. Articles and Letters to the Editor (published) (cont.)

Box 16 (cont.)

Comment on "The conservation principles and Kepler's laws of planetary motion", reprinted from *American Journal of Physics*, Vol. 44(11), p. 1119, November 1976.

With James C. Rainwater. *Inverse-square orbits: A geometric approach*, reprinted from *American Journal of Physics*, Vol. 47(3), pp. 223-227, March 1979.

Oscillations of a particle attached to a heavy spring: An application of the Stieltjes integral, reprinted from *American Journal of Physics*, Vol. 47(6), pp. 508-514, June 1979.

Time variation of a vector attached to a moving frame, reprinted from *American Journal of Physics*, Vol. 46(12), pp. 1060-1062, December 1979.

Approach to teaching thermodynamic equilibrium, reprinted from *American Journal of Physics*, Vol. 47(12), p. 1088, December 1979.

Temperature, in *Encyclopedia of Physics*, 1st edition, eds. Lerner and Trigg. Addison-Wesley, 1980. pp. 1020-1021.

Dismantling a centuries-old myth: Newton's Principia *and inverse-square orbits*, reprinted from *American Journal of Physics*, Vol. 50(7), pp. 610-616, July 1982.

A Diatribe in Defense of Beauty, in the *Oberlin Alumni Magazine*, pp. 9-10, Winter 1982.

Course/Professor Evaluation, Physics 104, 1982

Response to a Comment of an Objection to Newton's Logic, reprinted from *American Journal of Physics*, Vol. 51(7), p. 583, July 1983.

Series VIII. Writings Files, 1942-2004 (span) (cont.)

Subseries 1. Articles and Letters to the Editor (published) (cont.)

Box 16 (cont.)

Correspondence: *Newton's* Principia *and Inverse-Square Orbits*, reprinted from Contemporary Physics, Vol. 24(6), pp. 623-625, 1983.

Emeritus Professor Robert Weinstock Continues Teaching, The Observer, February 2nd, 1984

Newton's Principia *and the external gravitational field of a spherically symmetric mass distribution*, reprinted from *American Journal of Physics*, Vol. 52(10), pp. 883-890, October 1984.

Babe Ruth and the Judgement of Brancazio, American Journal of Physics, Vol 54 (2), February 1986

Report on Spring 1986 Cases, Oberlin Honor Committee, December 15th 1986

Mostly Matrices: A Locally Produced Text, 1988.

Long-buried dismantling of a centuries-old myth: Newton's Principia *and inverse-square orbits*, reprinted from *American Journal of Physics*, Vol. 57(9), pp. 846-849, September 1989.

A novel method for solving a class of differential equations, reprinted from *American Journal of Physics*, Vol. 57(12), pp. 1144-1147, December 1989.

Temperature, in *Encyclopedia of Physics*, 2nd edition, VCH Publishers, 1991. P. 1246-1248.

Problem in Two Unknowns: Robert Hooke and a Worm in Newton's Apple, reprinted from *The Physics Teacher*, Vol. 30, pp. 282-288, May 1992.

Series VIII. Writings Files, 1942-2004 (cont.)

Subseries 1. Articles and Letters to the Editor (published) (cont.)

Box 16 (cont.)

Inverse-square orbits: Three little-known solutions and a novel integration technique, reprinted from *American Journal of Physics*, Vol. 60(7), pp. 615-619, July 1992.

Newton's Principia *and Inverse-Square Orbits: The Flaw Reexamined*, reprinted from *Historia Mathematica*, Vol. 19, pp. 60-70, 1992.

A Worm in Newton's Apple, 1993 Kluwer Academic Publishers. Printed in the Netherlands.

The Heavier They Are, the Faster They Fall--An Elementary Rigorous Proof, reprinted from *The Physics Teacher*, Vol. 31, pp. 56-57, January 1993.

Letter: *Mythology and Physics*, in *Wooster College Alumni Magazine*, Summer 1994.

Update on Isaac Newton, Spectrum Talk, March 13th 1996

Newton's Principia *and Inverse-Square Orbits in a Resisting Medium: A Spiral of Twisted Logic*, reprinted from *Historia Mathematica*, Vol. 25, pp. 281-289, 1998.

Electric Field of a Two-Charge Dipole: A Graphical Approach Extended, reprinted from *The Physics Teacher*, Vol. 38, pp. 430-431, October 2000.

Inverse Square Orbits in Newton's Principia *and Twentieth-Century Commentary Thereon*, reprinted from *Arch. Hist. Exact Sci.*, Vol. 55, pp. 137-162, 2000.

Two-Charge Dipole Revisited, reprinted from *The Physics Teacher*, Vol. 39, pg. 9, April 2001.

Series VIII. Writings Files, 1942-2004 (cont.)

    Subseries 1. Articles and Letters to the Editor (published) (cont.)

Box 16 (cont.)

    A Cannon's Recoil Against a Tree: How the Range Increases, reprinted from *The Physics Teacher*, Vol. 40, pp. 12-14, April 2002.

    Letters to Journal Editors, 1975, 1985, 1988, 1993, 2000, 2004, n.d.

    Subseries 2. Book Reviews, Responses, and Comments, 1961-1999 (span)

Box 17

    Book Review: Halliday, David and Robert Resnick, *Physics for Students of Science and Engineering* (1960). Review in *American Journal of Physics*, October 1961.

    Book Review: Michels, Walter C. and Correll, Malcom, and Patterson, A.L. *Foundations of Physics* (1968). Review in *American Journal of Physics*, February 1970.

    Book Review: Rosen, Joe, *Symmetry Dicovered* (1975). Review in *The Physics Teacher*, April 1976.

    Response to "Note to the American Journal of Physics" by Alfred Bork, reprinted from *American Journal of Physics*, Vol. 47(12), p. 1093, December 1979.

    Book Review: Pierce, John R., *An Introduction to Information Theory* (1980), n.d.

    Book review: Heisenberg, Elisabeth, *Inner Exile: Recollections of a Life with Werner Heisenberg* (1984). Review in *Isis*, 76: 2: 282, 1985.

    Book Review: Goldberg, Stanley, *Understanding Relativity.* Reprinted from *American Journal of Physics,* Vol. 53 (4), pp. 378-379, April 1985.

Series VIII. Writings Files, 1942-2004 (span) (cont.)

    Subseries 2. Book Reviews, Responses, and Comments (cont.)

Box 17 (cont.)

    Book Review: Calkin, Melvin G., *Lagrangian and Hamiltonian Mechanics* (1996). Review in *American Journal of Physics*, Vol. 66 (3), pp. 261-262, March 1998.

    Book Review: Lemons, Don S., *Perfect Form: Variational Principles, Methods, and Applications in Elementary Physics* (1997). Review in *American Journal of Physics*, Vol 66 (10), p. 935, October 1998.

    Book Review: Goodstein, David L. and Judith R. Goodstein, *Feynman's Lost Lecture; The Motion of Planets Around the Sun*, Review in *The Mathematical Intelligencer*, Vol. 21, No. 3, pp. 71-73, 1999.

    Miscellaneous book reviews, unpublished manuscripts, responses, and comments, 1971-75, n.d.

    Referee, 1959-1991 (8f)

Box 18

    Referee, 1992-2000 (3f)

    Subseries 3. Manuscripts (unpublished), 1968-1972, n.d.

Box 19

    Conics and the Equal-Angles Property: Whispering-Gallery Phenomenon Unique to the Ellipse, n.d.

    Darwin and Evolution, n.d.

    Dickens, Scott, and Thackeray, n.d.

    Electric and Magnetic Dipoles: A Rigorous Treatment, April 1972.

    Faster and Neater: Pythagoras Solves a Differential Equation.

Series VIII. Writings Files, 1942-2004, n.d. (span) (cont.)

Subseries 3. Manuscripts (unpublished) (cont.)

Box 19 (cont.)

Generating Functions for Harmonic-Oscillator Eigenfunctions in One and Two Dimensions: A New Derivation, n.d.

Gravity: A Product of the Masses, n.d.

Human Discharge Chain" Revisited: Exact Solution, n.d.

Human Discharge Chain" Revisited: Solution in Closed Form, n.d.

Linear Homogeneous Differential Equation with Constant Coefficients: A Friendly Matrix Route to the General Solution, n.d.

Newton's Principia *and the Laws of Classical Motion: A Nonperfunctory Examination*, n.d.

A Problem in Three Unknowns: What's F? What's m? What's a? n.d.

Rigorous Justification of the Canonical and Grand Canonical Distributions in Equilibrium Statistical Mechanics, February 1968.

Special Relativity without the Lorentz Transformation, n.d.

Uniform Circular Motion: Demolition of A Spurious Derivation of a=(v^2/r), n.d.

Untitled paper, includes prelude, chapter 9, chapter 10, n.d.

Untitled paper, n.d.

Series IX. Photographs, 1968

Box 19 (cont.)
        Calvin College, Grand Rapids, Michigan, 1968
                (6 black/white photographs, group shots with Weinstock)