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BULLETIN

American School of Home Economics

"The Profession of Home Making"
Home Study Courses

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American School of Home Economics
506 West 69th Street, Chicago, Illinois

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Home Economics

STANDS FOR

The ideal home life for today unhampered by the traditions of the past.

The utilization of the resources of modern science to improve the home life.

The freedom of the home from the dominance of things and their due subordination to ideals.

The simplicity in material surroundings which will most free the spirit for the more important and permanent interests of the home and of society.

We Believe—

THAT right living should be the fourth "R" in education.

THAT home-making should be regarded as a profession.

THAT health is the duty and business of the individual; illness of the physician.

THAT most illness results from carelessness, ignorance, or intemperance of some kind.

THAT as many lives are cut short by unhealthful food and diet as through strong drink.

THAT on the home foundation is built all that is good in state or individual.

THAT the upbringing of children demands more study than the raising of chickens.

THAT the spending of money is as important as the earning of the money.

THAT economy does not mean spending a small amount but in getting the largest returns for the money expended.

THAT the home-maker should be as alert to make progress in her life-work as the business or professional man.

THAT the most profitable, the most interesting study for women is the home, for in it center all the issues of life.

THAT the study of home problems may be made of no less cultural value than the study of art or literature and of much more immediate value.

—*American School of Home Economics.*

MRS. ARTHUR COURTENAY NEVILLE

President, American School of Home Economics; First Chairman, Home Economics Committee, G. F. W. C.

BULLETIN

of the

American School *of* Home Economics

Published quarterly for students graduates
and others interested in the School
and its work

CHICAGO
506 WEST SIXTY-NINTH STREET
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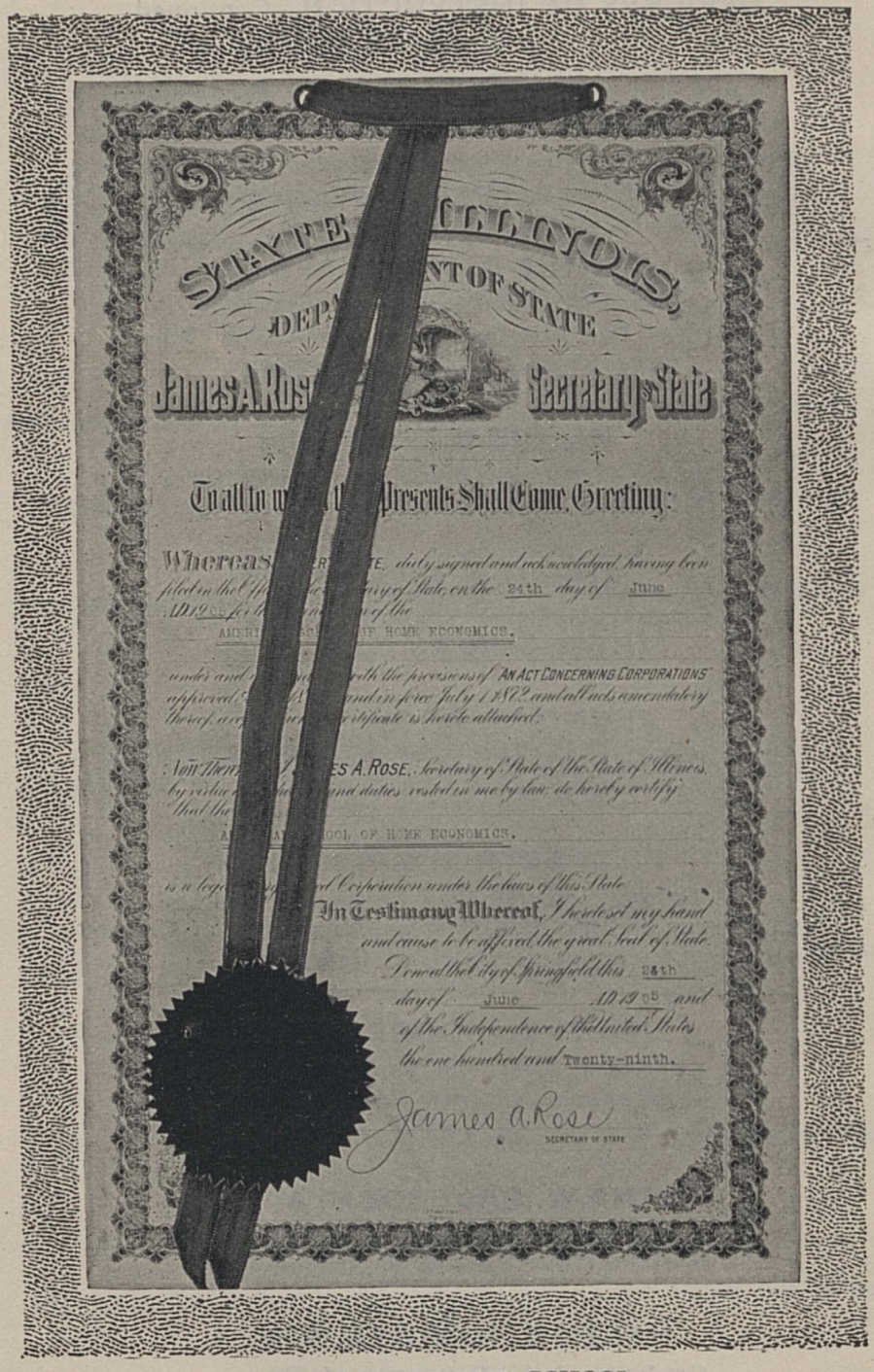


STATE OF ILLINOIS,
DEPARTMENT OF STATE
James A. Rose Secretary of State

To all to whom These Presents Shall Come, Greeting:

Whereas ... duly signed and acknowledged, having been filed in the office of the Secretary of State, on the 24th day of June A.D. 19... for the incorporation of the AMERICAN SCHOOL OF HOME ECONOMICS,

under and in accordance with the provisions of AN ACT CONCERNING CORPORATIONS approved ... and in force July 1, 1872 and all acts amendatory thereof, a copy of which certificate is hereto attached;

Now, Therefore, I, JAMES A. ROSE, Secretary of State of the State of Illinois, by virtue of the powers and duties vested in me by law, do hereby certify that the AMERICAN SCHOOL OF HOME ECONOMICS,

is a legally organized Corporation under the laws of this State.

In Testimony Whereof, I have hereunto set my hand and cause to be affixed the great Seal of State. Done at the City of Springfield this 24th day of June A.D. 19 08 and of the Independence of the United States the one hundred and Twenty-ninth.

James A. Rose
SECRETARY OF STATE

CHARTER OF THE SCHOOL

The American School of Home Economics is chartered as an educational institution under the laws of the State of Illinois which provide for associations conducted "not for pecuniary profits." It is governed by the Board of Trustees.

GENERAL STATEMENT

DURING the last two generations there has been a very great industrial evolution, but in the affairs of the home, there has been no less than a *revolution.* Formerly, the housewife was the head worker in the many home industries. With the help of other members of the family, she spun and wove the fabrics used by the household, made the clothing, boiled the soap, preserved, canned, baked—created out of raw materials the simple necessities of life. Great factories now supply the products of these old time home industries at far less cost and in infinite variety, so that the family of moderate income may now have a wide choice of luxuries which were beyond the means of the rich fifty years ago.

Industry and Science

Industrial advancement must necessarily take place along the path of science. Thus a knowledge of the laws of electricity preceded the practical application of this force; the laws of steam were carefully studied by Watt before he made the first steam engine a success.

No such dependent relation exists between home life and science. Industrial changes have taken much of the creative work from the home, but twentieth century economic and social conditions have forced many new complications upon it. Only recently has scientific study been given to the affairs of the household. The public schools have begun to teach the rudiments of cooking

and sewing, and a few colleges now give adequate courses in household economics, but the great majority of women have received no special training for their principal business in life—*that of home making.*

Business Training

The young man must go through a long period of apprenticeship or technical training before he is given a responsible position. The business man sees to it that he is fit for the work he is to undertake.

Not so with the average young woman; too often she enters married life with a vague sense that dinners must be provided and the house cared for, and with a hope that a knowledge of such matters will come somehow, by instinct, intuition or happy accident. Sad experience may teach her otherwise, and the realization will come that responsibilities of health and happiness, and of life and death are in her charge.

Home Management a Business

The management of a home and the care of a family is a business—a profession, and a very complex and difficult one to master. All the wisdom a mistress may have, or can acquire by the most diligent effort, is needed for success in the profession of home making.

Household science holds every other in tribute, yet it is the newest of the sciences. Traditions handed down from mother to daughter and the unsupported evidence of friends is not sufficient for present day needs. To meet changed conditions, a study of the latest economic developments relating to the home is necessary for all true mothers and real helpmeets.

The Mistress of a Home

A knowledge of the laws of health, an understanding of the sanitary requirements of the house, the study of values, both absolute and relative, of the various articles used in the home, including food, the wise expenditure of money, time and energy, the scientific

principles underlying the selection and preparation of food, the right care of children—both physical and mental—the ability to secure efficient service from others, and practice in the different household arts, all are required before the housewife can be considered *mistress* of her home.

Necessity of Household Economics

"The home is the center of the universe and the mistress is the center of the home." In her hands are the keys of home happiness. She is the disbursing end of the marriage partnership, and on the wisdom of the spending depends the financial prosperity of the family; on efficient home management depends the comfort and happiness of the family; on proper care and guidance by the mother depends, in a large measure, the character and life success of the children; on the selection of the food and its preparation, together with the sanitary character and care of the house, depends largely the health of the family; on prompt action in emergencies, on the immediate recognition of disease, and on proper care in convalescence, oftentimes depends the saving of life itself.

To all homemakers—present or prospective—who have not had the advantage of careful home training, study of household economics is imperative, and even for such fortunate ones, further study is necessary to acquire modern ideas of sanitation, of the care and training of children, the laws of hygiene and the treatment of sickness.

How Shall Knowledge Be Acquired

A bewildering amount of literature is to be had dealing with different parts of household economics, but few of the books meet the requirements of the homemaker, and many are weak and hardly worth while. An extensive library and a discouraging amount

of reading is required to obtain a fair idea of home economics. Reading and study by oneself is very apt to be without system and to lead to discouragement and abandonment. Desultory reading cannot be expected to serve as a substitute, or to be as interesting as study under the guidance of experienced teachers.

Distance, lack of time, and the expense debar almost all who might wish to attend some of the few good schools and colleges which teach home economics, so that a correspondence course is the only means by which very many can obtain an adequate knowledge of this most important subject.

Correspondence Courses by Authorities

To fill the great demand, prominent teachers in the foremost schools and colleges in America, which teach home economics planned, prepared, and supervise the teaching of correspondence courses in home-making. Much of the material heretofore has existed only in the note books and lectures of the teachers who prepared the lessons, and is now to be obtained for the first time outside the colleges in which they teach.

Educational Standing

The American School of Home Economics was founded in 1904 and in 1905 was chartered by the State of Illinois as an educational institution, under the present Board of Trustees. The fifteen thousand graduates and members of the School gives testimony of the great interest and practical value of the instruction. The lessons of the course are now recognized as standard text and are used as class textbooks in over one hundred fifty schools and colleges.

The School has borne a prominent part in the development of the home economics movement and hopes in the future to prove increasingly useful to the multitude of home-makers who are awakening to the great possibilities of "Home-Making as a Profession".

Correspondence Teaching

TEACHING by correspondence is imparting knowledge by written instead of oral instruction. The school goes to the scholar, not the scholar to the school. Each student receives individual, personal attention. She is not compelled to suit her hours of study to those of other students and may progress as rapidly as time and inclination allow. Spare moments may be utilized without the loss of time necessary to attend lectures or classes. Study in the course may begin at any time and there are no entrance requirements. This method of teaching, therefore, is especially well adapted for homekeepers and mothers, whose time for study is necessarily limited and irregular.

Lesson Papers

As the lesson papers (or books) have been prepared especially for correspondence teaching, they are quite unlike ordinary text books, which are not adapted for home study. They are written in a concise, interesting style, free from technical terms, and the meaning is brought out clearly by typical examples and simple home experiments, when this is practicable. Great attention is paid to illustrations, and many drawings, sketches and photographs are used to make the text more plain. In fact, the lesson papers correspond more nearly to an illustrated lecture by the author than to text books—their advantage over a lecture being that the matter is in permanent form and may be referred to at pleasure. Above all, the papers are written from the useful, prac-

tical standpoint; the needs of the average American homemaker and mother have been kept constantly in mind; fads and theories have been avoided, and only such scientific facts and principles as have direct bearing on the daily problems of the home are included.

The lesson books are in pamphlet form, making them very convenient for study. They have been revised a number of times, after having been tested by use and supplemented.

Instruction Supervised by Experienced Teachers

The instruction is given by, or under the supervision of the teachers who prepared the lessons, thus assuring the highest grade of correspondence teaching. Diplomas are granted on completion of full courses; certificates on completion of special and short courses.

METHOD OF WORK

Each subject is divided into lessons or parts, usually three, of about sixty to eighty pages each. These are sent as fast as progress is made in the course. Upon enrolling, the student is furnished with the first two lesson books and is sent a general letter of directions and a letter from the author of the subject, giving further suggestions for study.

Teaching by Mail

After reading the first lesson a number of times, and making the simple experiments when called for, the student turns to a series of practical questions at the end of the lesson and writes the answers to the best of her ability. The completed "test" is sent to the school to show that the subject is understood. From the school it is forwarded to the instructor, usually the author of the subject, who carefully corrects it. Helpful criticisms and suggestions are written on the paper in red ink, all questions of the student answered, and a personal

letter written with each lesson. The student, in the meantime, is working on the next lesson, so there is no loss of time. On receipt of the first test paper, the third lesson book in the course is sent, and thus the student always has two unanswered lessons on hand.

Test Questions

By the test questions, the important points in each lesson paper are brought out, and the student is made to think, to understand, and to remember.

When the course is finished, a diploma or certificate is given, stating that the work has been completed with "Credit," or with "High Credit," according to the grade of work.

Wherever difficulties are met in a paper, or the student fails to understand some part, an *inquiry blank* provided for the purpose, is filled out and sent to the School. By return mail full explanations are sent.

Special Inquiry Department

An important feature, and one which will be of much help, is the Special Inquiry Department, to which may be submitted any problem relating to the subject in the course. Such question is referred to the one best fitted to answer it, and thus expert advice is at the command of our students.

System and Time Limit

By a very complete system of card indexing, close watch is kept on the progress of each student, and letters are sent whenever there seems to be neglect of the work. The correspondence of each student is kept separate and confidential.

It is the purpose of the teachers to come into as close personal touch with the individual student as is possible through written word, and it is the intention that every one beginning shall finish her course in reasonable time, and understand thoroughly everything included in it.

There are no entrance requirements except the desire to learn, and study may begin at any time. The work planned in the full course should easily be accomplished within one year; three years' time, however, is allowed for the completion of the course, and this limit will be extended for any good reason. The tuition fee covers the entire expense to the student.

Other Departments

The Bureau of Information, Employment Bureau, Lecture Bureau, Circulating Library Department, Purchasing Department, Club Study Department, have been developed to fill definite demands during the five years' growth of the School, and expert assistance in all lines is available to members without charge.

Professional Courses

The courses for teachers, institution managers, dietitians, nurses, matrons, and housekeepers are the regular courses with considerable supplementary reading, more experimental work, and direct professional studies, as the teaching of domestic science and the like. These qualify graduates for excellent positions.

From an Educational Standpoint

Correspondence instruction by qualified teachers has passed the experimental stage. The system has been successfully applied to a great variety of subjects by the University of Chicago and other colleges. The late Dr. Edward Everett Hale said in regard to correspondence teaching:

"After the general system of public school instruction, this system is the next important organized system of education at work in the nation. I see no reason why its range should not be extended much further. Indeed, I look to it for the accomplishment of John Adams' hope that every man and every woman in the nation might receive a *liberal preparation for the business of life.*"

COURSES AND TUITION FEES

COMPLETE COURSE

This course covers, systematically and in an interesting and practical way, all of "The New Profession of Home-Making" and "The Art of Right Living." Diploma awarded on completion.

Order of the Lessons

FOOD SUBJECTS

(1) Chemistry of the Household Parts I, II, III
(3) Principles of Cookery Parts I, II, III, IV
(5) Food and Dietetics Parts I, II, III, IV
(7) Household Management Parts I, II, III, IV

HEALTH SUBJECTS

(2) Household Bacteriology Parts I, II, III
(4) Household Hygiene Parts I, II, III, IV
(6) Personal Hygiene Parts I, II, III
(8) Home Care of the Sick Parts I, II, III

DOMESTIC ART

(9) The House — Its Plan, Decoration, and Care Parts I, II, III
(10) Textiles and Clothing Parts I, II, III

CHILDREN

(11) Care of Children Parts I, II, III
(12) Study of Child Life Parts I, II, III

TUITION FEE—$48.00, payable $5.00 monthly.

SPECIAL COURSES

The Special Courses are made up of closely related lessons of the Complete Courses. Certificates awarded on completion.

Food Course

Chemistry of the Household Parts I II, III
Principles of Cookery Parts I, II, III
Food and Dietetics Parts I, II, III
Marketing (Management III)
Digestion (Personal Hygiene II)
Children's Food (C. of Children II)

Health Course

Household Bacteriology Parts I, II
Household Hygiene Parts I, II, III
Personal Hygiene Parts I, II, III
Home Care of the Sick Parts I, II
Care of Children Parts I, II, III

Housekeeping Course

The House — Its Plan, Decoration and Care Parts I, II, III
Chemistry of the Household Parts I, II, III
Household Hygiene Parts I, II, III
Household Management Parts I, II, III

Motherhood Course

Study of Child Life Parts I, II, III
Care of Children Parts I, II, III
Home Care of the Sick Parts I, II
Textiles and Clothing Parts I, II, III

TUITION FEE — (For each course) $25.00, payable $3.00 monthly.

COMPLETE READING COURSE

All the lessons are sent post-paid, one a week. Brief reports are returned on each of the twelve subjects. No formal instruction is given but all other privileges and full use of all departments of the School are included. A Reading Course Certificate is granted when all the reports are received.

TUITION FEE — $24.00, payable $2.00 monthly.

PROFESSIONAL COURSES

These courses give preparation for positions as teacher of domestic science or domestic art; institution management, including matrons, housekeepers and dietitians in homes, school dormitories, sanataria, hospitals, hotels and large households; managers of lunch rooms, restaurants and catering business; private nurses, mothers' helpers and social workers. Graduates are qualified for good positions

The regular lessons serve as the fundamental ground work for these courses. The specialized professional subjects are given by means of supplementary reading and study from other books and pamphlets, all of which may be borrowed from the School Circulating Library for the cost of postage.

TEACHERS' COMPLETE COURSE

The order in which the lessons are taken is the same as in the regular Complete Course. In addition, supplementary study is required on each of the twelve subjects, with more experimental work and a course on the teaching of domestic science. A final general examination is given, including questions on teaching and a Teachers' Diploma is granted on completion.

Education, at least equivalent to a good high school course, is needed to qualify for positions as special teacher of domestic science in town or city schools. Teaching experience in other lines is a decided advantage. It is desirable to supplement the correspondence course with at least a summer school course in laboratory methods.

TUITION FEE — $54.00, payable $5.00 monthly.

INSTITUTION MANAGEMENT COMPLETE COURSE

All the lessons of the Regular Complete Course are taken, but the order is somewhat different. Supplementary reading and study is required, and there are lessons on "Institution Housekeeping." A final general examination is given and an Institution Management Diploma is granted on completion.

To be successful in positions open to graduates of this course, applicants should be at least 25 years of age and should have had experience in housekeeping and management.

TUITION FEE — $54.00, payable $5.00 monthly.

TEACHERS' SHORT COURSE

Chemistry of H's'ld Parts I, II, III
Principles of Cookery Parts I, II, III
Marketing (Management III)
Food and Dietetics Parts I, II, III
Digestion (Personal Hygiene II)
Textiles and Clothing I, II, III

Supplementary study is required on each subject and the course on the Teaching of Domestic Science is included. A final examination is given and a Certificate granted on completion.

TUITION FEE — $27.00, monthly, payable $3.00 monthly.

INSTITUTION MANAGEMENT SHORT COURSE

Cleaning and Laundry(Chemistry II)
Principles of Cookery Parts I, II, III
Food and Dietetics Parts I, II, III
Household Hygiene Parts I, II, III
Institution Housekeeping *and* Supplemental Study.

TUITION FEE — $27.00, payable $3.00 monthly.

NURSES' SHORT COURSE

Household Bacteriology Parts I, II
Home Care of the Sick Parts I, II
Food and Dietetics Parts I, II, III
Care of Children Parts I, II, III
Personal Hygiene Part II
Supplementary Study

TUITION FEE — $27.00, payable $3.00 monthly.

DIETITIANS' SHORT COURSE

Chemistry of the Household Parts I, II, III
Principles of Cookery I, II, III
Food and Dietetics Parts I, II, III
Digestion (P. Hygiene Parts II, III)
Care of Children Part II
Marketing (Management Part III)
Supplementary Study.

TUITION FEE — $27.00, payable $3.00 monthly.

NOTE — A discount of 10 per cent is given on the tuition fee of any course paid in full, cash with the enrollment.

WHAT THE TUITION FEE INCLUDES

1. *Lesson Books.* A complete series for the course selected, to be supplied as fast as the student proceeds with the studies.

2. *Personal Instruction* by prominent teachers, authors of the lesson books or their assistants.

3. *Three Years' Time* allowed for completing the course, which limit will be extended for any good reason. The studies may be discontinued for a time and taken up again to suit convenience; monthly payments, however, cannot be deferred.

4. *Engraved and Embossed Diploma* — Crane's parchment, 16 x 21 inches on finishing Complete Courses; certificates of the same design for Special Courses, Short Courses and Reading Course.

5. *All postage* on lesson books, letters, tests and Bulletins sent to the student.

6. Use of the *Bureau of Information.* Through this department all personal questions on the lessons, teaching or home problems are answered — from the simplest to the most technical. The Faculty and Board of Trustees and large membership give the School exceptional facilities for supplying expert assistance, not to be obtained otherwise.

7. Use of the *Circulating Library Department,* containing over 400 books, reports, bulletins, pamphlets and articles. All books of merit now in print relating to the subjects taught, and all new books as soon as published, may be borrowed for the cost of postage. Through this department any subject may be studied exhaustively under the guidance of specialists.

8. Use of the *Reading Course Department.* Courses in literature, history, biography, nature-study, science, arts and crafts, social forms and usage, children's reading, etc. The books and pamphlets suggested may be borrowed for the cost of postage and a small fee. They may be purchased if desired, after reading, at a discount covering the fee and the postage.

9. Use of the *Club Study Department.* Programs, suggestions and assistance given in the club study of home economics, sociology, civics, ethics, education and of all subjects that affect the home. Suggestions and criticism given on papers.

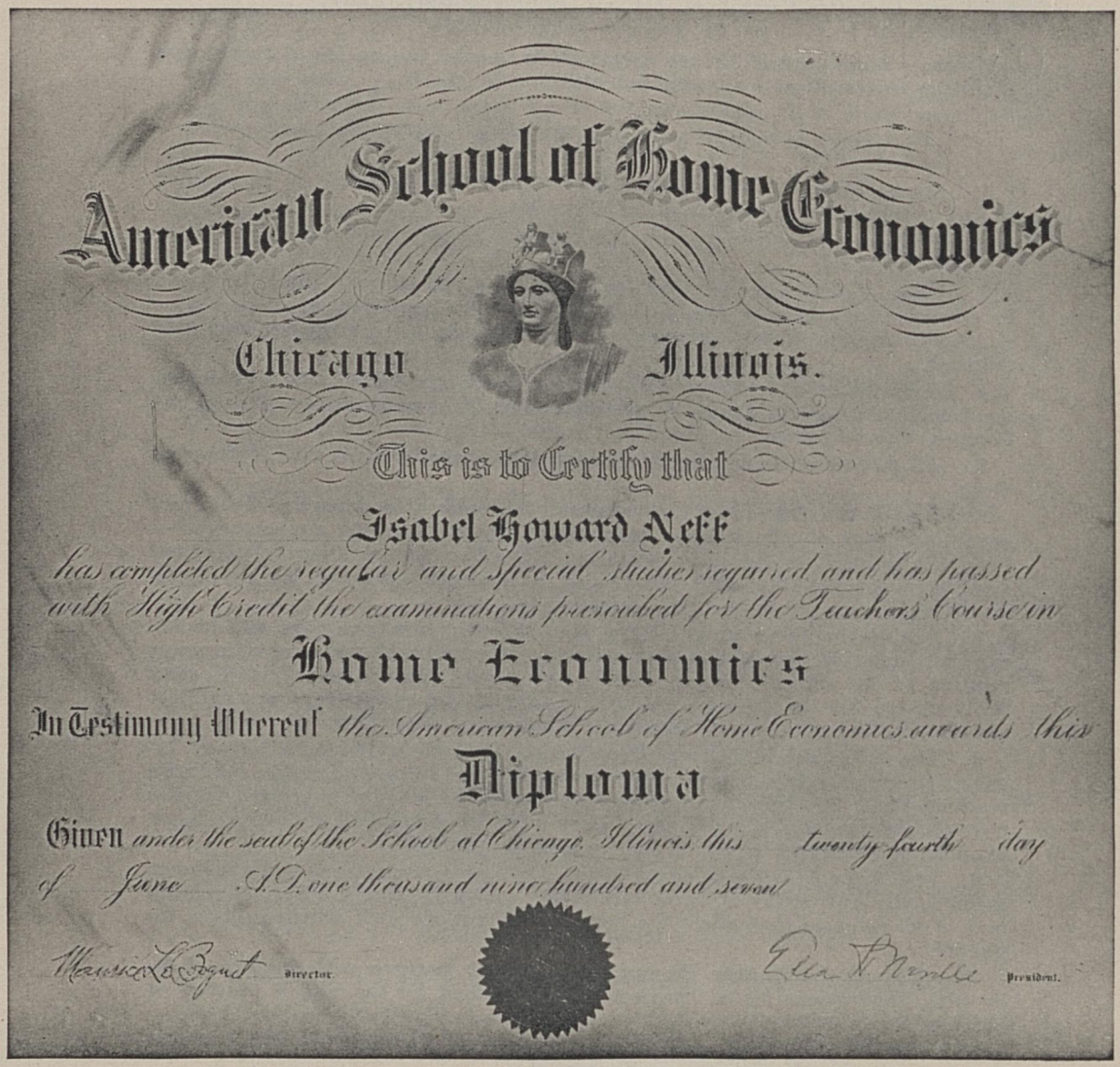
10. Use of the *Lecture Bureau.* Manuscript lectures with lantern slides or with illustrations for a "projectoscope," loaned for the cost of postage or express.

11. Use of the *Purchasing Department* giving discounts on books, magazines, apparatus, household appliances, etc.

12. Use of the *Employment Bureau.* Assistance given in securing domestic help and in obtaining professional positions.

13. Use of a *House Building Bureau.* The lessons on "The House" give fundamental ideas and plans. In addition, this department has a large collection of plans, books and articles on house building, decoration, and furnishing which are loaned according to individual requirements.

14. *School Bulletins* published quarterly, giving reviews of new books, references, reports, articles of interest and the progress of home economics.



ENGRAVED AND ENGROSSED DIPLOMA GIVEN ON FINISHING THE COMPLETE COURSE

Size 16x21 inches, on Crane's heavy Parchment Bond

A Certificate of the same size and design is given on completion of the Institution Management Course, Dietitian's Course, and other Special Courses

Synopses of Subjects

Chemistry of the Household

A Day's Chemistry

BY

Margaret E. Dodd, S. B.

Teacher of Domestic Science, Garland Training School, Boston.

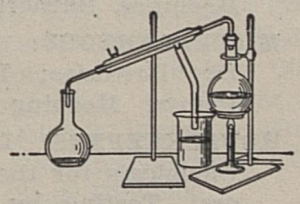
Graduate Mass. Institute of Technology.

The chemical substances and chemical changes met by the housekeeper in a day's work about the home are described in the order of their natural occurrence. The principles of chemistry and the nature of the common substances of every-day life, together with their simple chemical changes, are described in non-technical language. Difficult theoretical and technical chemistry is not introduced. The effects of heat and other physical forces upon the important chemical substances are taken up briefly.

CHIEF TOPICS TREATED

WATER: Its Occurrence, Impurities and Purification, Solutions and Solubility; Hard and Soft Water; Chemical Composition; Effect of Heat and Cold; Boiling Point Under Various Conditions; Latent Heat.

AIR: A Real Substance; Weight and Volume; Composition — Oxygen, Nitrogen, Argon, Carbon Dioxide, Water Vapor; Humidity, Dew Point, Effect of Atmospheric Pressure; Properties of Gases; Necessity of Ventilation.



FIRE AND FUELS: Building a Fire; Chemistry of a Match; Kindling Temperature; Wood, Coal, Charcoal, Peat, Kerosene, and Gasoline; Production of Combustion; Comparison of Fuels.

CHEMICAL ELEMENTS AND COMPOUNDS: Definite Composition; Conservation of Matter; Chemical Change the Source of Heat and Energy; Vital Temperature; Oxidation in the Body.

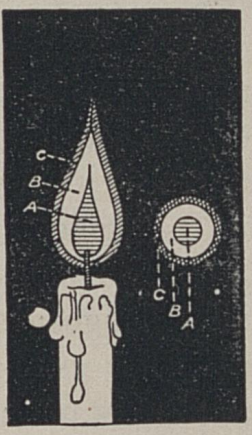
FOOD AND ITS FUNCTIONS: Why We Must "Eat to Live"; The Body as an Engine; Production of Heat; Supply of Wastes; Supply of Forces.

SUGARS AND STARCHES: Cane Sugar; Grape Sugar; Milk Sugar; Nature of Starch; Use; Foods Rich in Starch; Effect of Cooking; Digestion of Sugars and Starches; Bread—Chemistry of Bread Making; Yeasts.

FATS: Butter; Cream; Effect of Heating; Function of Fats as Food; Digestion of Fats; Heat Obtained from Fats.

NITROGENOUS FOODS: Proteids; Lean Meats; Eggs; Casein; Gluten; Use as Food; Effect of Cooking; Digestion; Other Food Materials, Mineral Matter, Stimulants, Tea, Coffee, etc.

CLEANING: Sources of Dirt; Dust and its Removal; Grease; Alkalies; Acids; Salts; Effect of Alkalies on Grease; Cleaning Metals; Silver Polish, etc.; Cleaning Marble, Woodwork, etc.; Soaps, Manufacture and Varieties; How Soap Cleanses; Hard Water with Soap; Softening Water; Washing Soda; Caustic Soda; Potash; Ammonia; Borax; Washing Powders; Naphtha, Kerosene, etc.



CHEMISTRY OF THE LAUNDRY: Structure of the Fibers; Chemical Action on Textiles; Mercerization; Laundering; Washing Colored Clothes; Treatment of Woolens; Bleaching with Sulphur Dioxide, with Chloride of Lime, with Javelle Water; Hydrogen Peroxide.

REMOVAL OF STAINS: Grease Spots; Solvents, Absorption Methods; Bluing, Grass, Tea, Coffee, and Fruit Stains; Mildew; Vaseline; Paints; Indelible Ink, Writing Ink, Colored Ink; Iron Rust; Treatment of Delicate Fabrics.

CHEMISTRY OF BAKING POWDER: Ingredients; Cooking Soda, Saleratus, Cream of Tartar, Phosphates, Alum; Experiments with Baking Powder.

CHEMISTRY OF LIGHT: The Chemistry of a Candle, Kerosene Lamps; Coal Gas, Water Gas, Gasoline Gas, Acetylene Gas; Gas Machines, Burners, Explosions; Safety Lamp.

MISCELLANEOUS: Electric Batteries; Simple Cell, Le Clanche Cell Dry Batteries; Lime, Its Compounds and Uses; Chemistry of Plants; Meaning of Chemical Formulas.

HOUSEKEEPERS' LABORATORY: Sciences Based on Experiments; Chemicals for the Household; Precautions; Home Tests for Colors; Testing by Comparison; Testing Washing Powder, Silver Polish; Tests for Starch, Lime, Alum, etc.

Principles of Cookery

BY

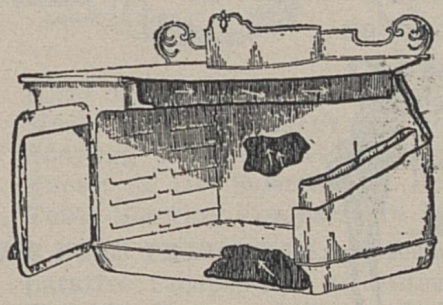
Anna Barrows

Teacher of Cookery, Columbia University, Teachers College
Director Chautauqua School of Cookery

Foundation principles of food preparation are treated in a way which is both practical and theoretical. No attempt is made to teach the details of cooking, for these are given in any good cook-book. The endeavor has been to go behind the cook-books; to analyze and systematize the mass of details and recipes and show the fundamental laws governing the best practice. The gradual evolution of the present methods of the preparation and cooking of food is traced. With each food material studied, reference is made to the best temperature for cooking it, and the utensils especially adapted for it.

CHIEF TOPICS TREATED

FIRE AND FUEL: The Different Fuels and the Stoves and Methods Suited to Each; Wood, Charcoal, Soft and Hard Coal, Coke, Gas, Kerosene, Gasoline; Economy of Fuel; Aladdin Oven; Swedish Oven.



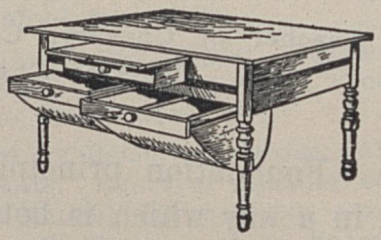
WATER AND ICE: Methods of Cooking in Water; Effects of Different Temperatures; Steam Cooking; Proportion of Water on Foods; Adding Water to Dried Foods; The Refrigerator; Iced Foods; Clean Utensils.

CHOICE, PREPARATION, AND PRESERVING: Natural Foods; Primitive Preserving; Dried Fruits; Nuts; Legumes; Canned Goods; Preservatives; Canning and Preserving; Utensils and Methods; Classifications of Foods.

MILK AND ITS PRODUCTS: Composition; Experiments with Milk; Curdling; Precautions in Using; Effect of Heating; Milk with Other Foods; Use of Sour Milk; Butter, Composition, Change in Cooking; White Sauce by Different Methods; Cheese; Food Value, Methods of Preparing.

EGGS: Their Many Uses; Composition; Effects of Different Temperatures; Combinations with Other Food Materials; Relative Cost; Eggs as Blenders of Food Materials; Foods Depending upon Eggs for Lightness; Manipulation.

FISH, FOWL AND FLESH: Structure and Composition of Meats; Cuts of Meat; Boiling; Stewing; Roasting; Broiling; Made Dishes; Fish as Food; Methods of Preparing Fish for the Table; Poultry-Cleaning and Cooking.



VEGETABLES AND GRAINS: Classes of Vegetables; Structure; Methods of Cooking; etc.; Combination with Different Food-Principles; Salads; Soups; Kinds of Grain; Absorption of Water; Temperature; Time.

BREAD AND OTHER DOUGHS: Varieties of Flour; Raised Bread; Yeast, Different kinds and Uses; Comparison of Methods of Bread Making; Short Process; Long Process; Temperature of Baking; Other Means of Lightening Dough, Soda and Acids; Baking Powder; Air; Action of Shortening; Eggs; Cake; Pastry.

FORM AND FLAVOR: Effect on appetite; Use of Left-Overs; Garnish; Special Utensils to Vary Form of Foods; Development of Flavor by Heat; Flavoring Materials; Advantage of Their Use.

CHOICE OF FOOD FOR A DAY: Seasons of the year; Variety; The Principle of Contrast; Menus; Serving; Miscellaneous.

Food and Dietetics

BY

Alice Peloubet Norton, M. A.

Assistant Professor of Home Economics, School of Education, University of Chicago; Director of the Chautauqua School of Domestic Science.

"The food supply is the controlling factor in all life, vegetable, animal or human." The food and feeding of the family is worthy of at least as careful study as that of domestic animals, yet such study is rarely given to it. The science of dietetics is less exact for man than for animals, but great advances have been made in the last decade. During this time, the United States Government has employed a corps of experts to study the problems of food and nutrition. The results of the latest researches are summarized in this course.

CHIEF TOPICS TREATED

GENERAL STATEMENT OF FOOD PROBLEM: Importance; Factors Involved; Relation to other Household Problems.

COST OF FOOD: Proportion of Income Expended for Food; Cost as Modifying the Selection of Food; Comparative Cost of Animal and Vegetable Foods.

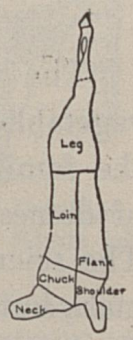
FOOD AND THE BODY: Composition of Body as Determining the Amount and Kind of Food; Uses of Food; Potential Energy and Its Measure; Mechanical Equivalent of Heat; Definition of Calorie; Chart Showing Calories Yielded by Different Foods; Digestibility as a Factor in the Selection of Food; Proportion of Food Absorbed; Table Showing Comparative Digestibility of Common Foods.

THE FOOD PRINCIPLES: Discussion and Illustration of Each; Comparative Composition of Different Food Stuffs; Charts and other Graphic Representations of Percentage Composition; Amounts in Ounces of Different Principles in Common Foods; Definitions of Nutritive Ratio; Food Value.

DIETARY STANDARDS: German, English and American Standards; Statistical and Experimental Dietaries and the Value of Each; A Day's Ration,—Expressed in Terms of Meat, Vegetables, etc., Showing Proportion of Food Principles and of Calories; Method of Calculating Dietaries; Practical Use of Dietary Standards by Housekeepers.

STUDY OF SPECIAL FOOD STUFFS: Animal Foods; Meat and its Substitutes; Digestibility and Food Value of Different Kinds of Meat; Soups and Meat Extracts; Fish as a Meat Substitute; Eggs and their Food Value; Other Substitutes for Meat.

MILK AND ITS PRODUCTS: Food Value of Milk; Cheese and Butter; Digestibility of Each under Different Conditions; Cost of Milk as a Source of Proteid.



CEREALS AND THEIR PRODUCTS: Geographical Distribution; Comparison of the Composition of Different Cereals; Wheat and the Manufacture of Flour; Different Kinds of Flour and their Comparative Value; Tests for Good Flour.

BREAD OF DIFFERENT KINDS: White, Whole Wheat, Graham and Rye; Yeast Bread; Salt Rising Bread; and Baking Powder Mixtures; Some Late Investigations in Regard to Bread.

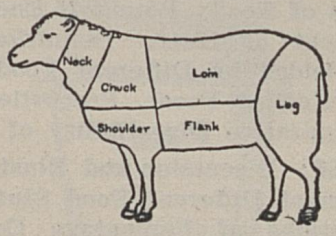
VEGETABLES, FRUITS AND NUTS: Selection and Use; Their Place in the Diet; Comparison of Different Kinds as to Nutritive Value, Cost and Digestibility.

SUGAR AND ITS USES: Food Value; Digestion; Use in the Dietaries of Adults and Children; Amount and Concentration.

TEA, COFFEE AND OTHER BEVERAGES: When and How to be Used; Physiological Effect.

SPECIAL DIET: Diet for the Sick to be Directed by Physician; Housekeeper to Know How to Carry out Directions; Diet for Children; For Students and for the Old.

ADULTERATION OF FOOD: Extent and Character; Responsibility of the Housekeeper; Pure Food Laws and their Extension.



Household Management

BY

Bertha M. Terrill, A. M.

Professor of Home Economics in University of Vermont; Author of U. S. Government Bulletins

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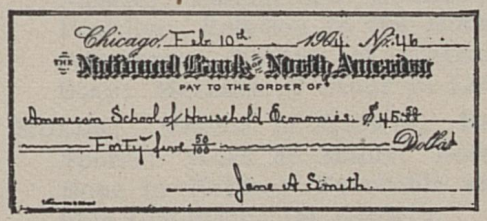
Ten billion dollars, more or less, is expended annually in the United States for household expenses, yet very little of it is laid out in other than a hap-hazard, unbusiness-like way. How to spend wisely is, perhaps, the most difficult problem of the household, and should have careful study. In these papers are given simple methods of household accounting and the basis for a correct division of income. The management of the household is discussed from the standpoint of the average family.

CHIEF TOPICS TREATED

THE HOME: Economic Importance of Consumption of Wealth; Home Making and Housekeeping a Profession or Business; Relation to Business World; Training and Business Methods Necessary.

HOME EXPENDITURES: Accurate Record of Great Importance; Value of Classification; Methods of Classification; Division of Income; General Basis Suggested; Comparison of Budgets; Variations Noted; Dr. Engel's Laws Regulating Expenses with Increase; Study of Values.


Chicago Feb 10th 1904 No. 46
The National Bank of North America
PAY TO THE ORDER OF
American School of Household Economics $45.55
Forty five 55/100 Dollars
Jane A Smith

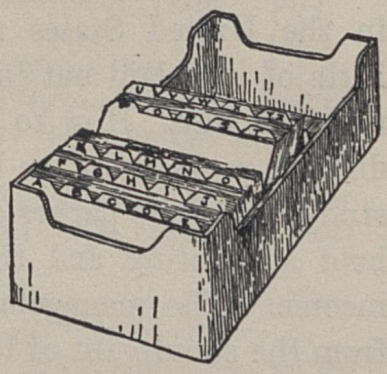
CLASSES OF EXPENDITURES: 1.—Food; Sources of Wide Variation in Expense; Needful and Unnecessary Expense; Standards for Different Incomes; 2.—Housing—Bought or Rented; Conditions, Favorable and Otherwise, for each; Necessary Economic Considerations in Either Step. 3—Operating Expenses,—Necessity of Considering and Cal-

culating; Details with Standards of Expense for Each. 4—Clothing; Primary Object; Obstacles; Avenues to Excessive Expenditure; Preventive Measures. 5—Higher Life; Importance; Paying Investments; Value of Some Provision for Saving.

HOUSEHOLD ACCOUNTS: Value in All Business Concerns Unquestioned; Housekeeping not Simple with its Different Departments—Numbers Employed, etc.; Accurate Knowledge Available at Any Time Necessary to Success; Simple Bookkeeping Only Necessary; Illustration of Simple Debit and Credit; Other Valuable Aids; Daily Totals; Journal, Ledger; Balance Sheet; Vouchers and Inventory; Various Methods.

THE BANK ACCOUNT: Varieties of Banks; Advantages of Bank Account; Method of Depositing; Pass Book; Checks; Endorsement; Stubs.

BUYING OF SUPPLIES: In General—Advantages of Thrift and Foresight; Buying in Quantity; Storage; Comparison of Department and Specialty Stores; Comparison of Best and Poorer Grades; Lists of Average Cost of Household Furnishings; Marketing—Use of Telephone; Value of Personal Selection; Meats—Cuts; Comparative Prices and Values; Vegetables—Comparison of Cost and Value in Season and out of Season; Canned; Fruits; Groceries, etc.



SYSTEM: Necessity of Organization; Ease of Systematized Work Versus Discomfort of Unorganized; Methods of Organizing and Directing a Household; Effects of System on 1. Helpers, 2. Children, 3. Personal Comfort.

DOMESTIC SERVICE: Relation to Economics in General; Advantages Compared with Other Kinds of Work; Disadvantages Compared with Other Kinds of Work; Employer's Point of View; Employee's Point of View; Present Situation; Apparent Tendencies; Specialization; Training and Classification of Labor.

Household Bacteriology

BY

S. Maria Elliott

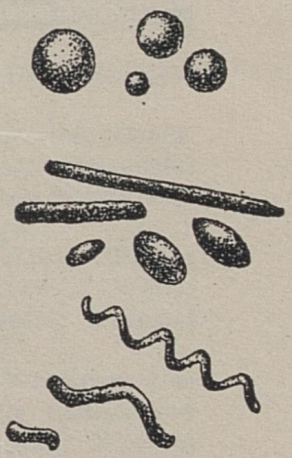
Instructor in Household Economics, Simmons College, Boston.
Formerly Instructor in Bacteriology, School
of Housekeeping, Boston.

Most persons now know that mankind is greatly troubled by the work of certain minute agents—variously termed germs, bacteria, micro-organisms. Few, however, realize the good that these forms do, nor understand them or their place in the world. It is the purpose of these papers to show the relations of good and of evil that these micro-organisms bear to the household.

CHIEF TOPICS TREATED

DUST: Its Sources, Importance, Composition, Movements; Dead and Living Ingredients.

"DUST GARDENS": Directions for their Preparation; Artificial Soil; Planting; Conditions of Growth; Nutrient Media and Natural Soils; Kinds of Dust Plants.



BACTERIA: Typical Forms, Size, Structure, Food, Methods of Growth, Reproduction, Movements, and Spores; Relations to Temperature, Moisture, and Light; Place in Nature; Plants, not Animals; Botanical Position; Relation to the Housewife; Refrigerator; Boiling of Clothes; Use of Soap; Methods of Study in Laboratory.

MOLDS: Method of Growth; Reproduction; Spores; Work of Molds; Botanical Relations in Nature; Favorable and Unfavorable Conditions for Growth.

YEASTS: Where Found; Reproduction; Work of Yeasts; Products; Bread Making; Best Conditions for Growth.

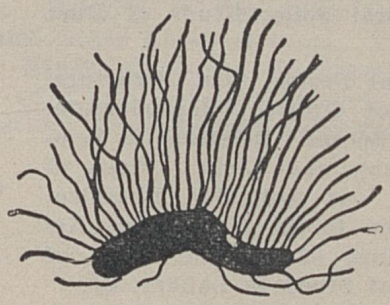
FRIENDLY MICRO-ORGANISMS: Bacteria as Scavengers; Butter Making; Cheese Ripening; Vinegar; Preparation of Leather; Sponges, Flax, etc.; Fermentation.

HARMFUL MICRO-ORGANISMS: Sour Milk; Potato Rot; Fermentation of Food; Putrefaction; Decay.

DISEASE GERMS: Comparatively Few in Number; Origin of Pathogenic Bacteria; Parasitic and Non-Parasitic; Methods of Work: Avenues of Attack; Typhoid; Lock-Jaw; Diphtheria, etc.; Means of Infection—Water, Ice, Milk, Dust, Insects, etc.; Methods of Protection; The Body's Resistance to Disease; Leucocyte; Hygiene; Toxines; Immunity; Anti-Toxines.

SAFE-GUARDS: Antiseptics; Disinfectants; Sterilization; Intermittent Sterilization; Pasteurization; Cleanliness in the Home; Sunlight; Fresh Air.

HISTORY OF BACTERIOLOGY: The Modern Science Dates from the Invention of the Compound Microscope; Investigations as to Fermentation and Putrefaction; Discoveries of Pasteur; "Pure Cultures"; Koch's Germ Theory of Disease; "Solid Cultures"; Discovery of Germ of Tuberculosis; Cholera; Typhoid Fever; Diphtheria, etc., Bibliography.



Household Hygiene

BY

S. Maria Elliott

Instructor in Household Economics, Simmons College, Boston

These lessons treat of hygiene in relation to the home; the proper environments of the house in the city and in the country; the best means of ventilation, heating, and lighting; the sanitary disposal of household wastes; water supply; modern plumbing, and the most recent ideals in regard to the sanitary care of the house.

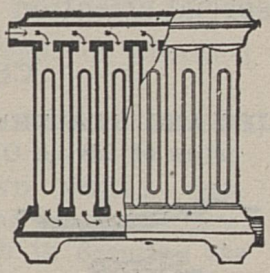
CHIEF TOPICS TREATED

HYGIENE OF THE HOME: Primary Needs; Prevention versus Cure; Foundations of Sanitary Science; Dampness, Darkness, and Dirt—the Modern Fates; Ideals.

SITUATION: Sundried Air; Ground Air; Ground Water and Dampness; Site; Drainage.

THE CELLAR: A Reservoir of Air for the House; Foundation Walls; Floor; Ceiling; Divisions of Space.

THE BOX ABOVE: Importance of Sunshine; The Sun Plan; Exposure; Dampness; Texts for Sanitary Sermons.



VENTILATION: Pollution of Air; Effects of Impure Air; Principles of Ventilation; Natural Tests; Amount of Air per Person; Position of Outlets; Window Ventilation; Ventilation at Night; Night Air; Summer Conditions; Mechanical Systems.

HEATING: Healthful Temperature; Systems of Heating; Open Fires; Stoves; Furnaces; Hot Water Heaters; Steam Heaters; Advantages and Disadvantages of each System.

DISPOSAL OF WASTES: Man's Wastes his Worst Enemies; Conditions in the Country; Sink Drains; Surface Disposal: Cesspools; Earth Closets; Modern Plumbing Systems; Plumbing Tests and Regulations. Sewerage—Its Parts and Requirements.

WATER SUPPLY: Sources of Drinking Water; Surface Water; Ground Water; Possibilities of Contamination; Safety of Wells; Springs; Precautions and Preventive Measures; Filters; Material of Pipes; Ice Supply.

LIGHTING: Relation to Eyesight; Natural Lighting; Windows; Use of Prism Glass; Artificial Lights; Air Consumed by Lamps and Gas Jets; Burners; Safety; Gas Fixtures and Piping; Electric Lights.

SANITARY CARE OF THE HOUSE: Relation of Dust and Cleaning; Floors; Wall Finish; Furnishings; Ideals.

Personal Hygiene

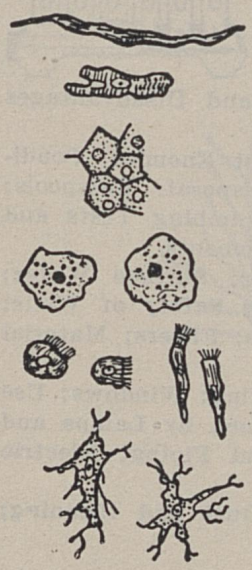
BY

Maurice Le Bosquet, S. B.

Director, American School of Home Economics, Member American Public Health Association, American Chemical Society, etc.

A knowledge of the structure and functions of the human body and the effects of varied environment and conditions on life, is essential to physical well-being. Many of the conditions of civilized life are unnatural and adverse, so that science must be called upon to aid nature in maintaining physical efficiency. It is the purpose of these papers to formulate the essential laws of health, and to give directions, both positive and negative, for right living, especial attention being paid to the conditions of home life.

CHIEF TOPICS TREATED



LIFE AND HEALTH: Dead Body and Living Body Compared; Properties of Living Organisms; Origin of Organs with Separate Functions; Definition of Health; Many Standards of Health; Civilization Produces Conditions for which the Human Body is not well Adapted; Inter-relations of the Bodily Functions; Importance of Maintaining the Efficiency of all Bodily Activities.

THE BLOOD: Color; Composition; Functions; The Circulatory Apparatus and the Circulation; The Pulse; Relation of the Blood to Disease; Anaemia.

DIGESTION: Alimentary Canal; Digestive Glands; Mechanism of Digestion; Processes of Digestion; Absorption; Assimilation; Elimination.

HYGIENE OF FOOD AND DRINK: Mixed Diet; Regularity of Meals; Number of Meals; Drinking with Meals; Amount of Water Needed in 24 Hours; Other Drinks; Tea, Coffee, Cocoa; Alcoholic Beverages.

RESPIRATION: Nose; Trachea; Lungs; Relation of Air to Blood in Lungs; Characteristics of Inspired and Expired Air; Importance of Abundant Supply of Pure Air; Mouth and Nose Breathing; Ventilation; Clothing; Breathing Exercises.

NERVOUS SYSTEM: Central Nervous System; Brain; Spinal Cord; Nerves; Sympathetic Nervous System; Reflex Acts; Automatic and Spontaneous Acts; Physiology of Habit; Rest; Sleep.

MUSCULAR SYSTEM: Voluntary and Involuntary Muscles; Relation of Muscular Activity to the Health of the Organs; Physical Exercise; Amount Needed; Relative Value of Different Forms of Exercise.

THE ENERGY OF THE BODY: Body Considered as an Engine; Supply and Waste; Heat; Work Done, (Movement, **etc.**); Stored Energy; Normal **Temperature** of Body; Regulation of Bodily Temperature.

HYGIENE OF THE SKIN: Structure and Functions of the Skin; Clothing; Bathing; Different Kinds of Baths; Advantages of Each; Other Treatment.

HYGIENE OF THE EYES: The Eye; Normal Vision; Errors of Refraction; Care of the Eyes; Reading in Cars.

HYGIENE OF THE HEARING ORGANS: The Ears; Structure; Care; Failing Hearing.

HYGIENE OF THE TEETH: Relation of Good Teeth to Digestion and to General Health; Care of the Teeth.

HYGIENE OF THE HAIR: Care of the Hair; Baldness; Massage, Hair Tonics.

INTER-RELATION OF PHYSICAL, MENTAL AND MORAL CONDITIONS: The Condition of Each is Influenced by the Others; Importance of Proportionate Attention to Each in Securing the Highest Degree of Efficiency for the Whole; Personal Responsibility for One's Own Health; Laws of Hereditary Responsibility to Future Generations.

Home Care of the Sick

BY

Amy Elizabeth Pope

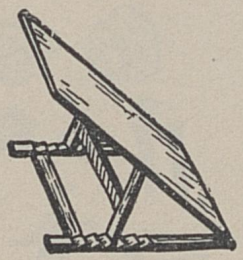
Instructor in Nursing in the Presbyterian Hospital and New York Hospital; Author "Essentials of Dietetics" and "Practical Nursing."

Nature cures, medicine only stimulates the natural processes for a period and careful nursing of bodily forces is necessary to give the body time to regain its proper functions, when these have been disarranged. Oftentimes the immediate recognition of the approach of disease enables the physician to apply remedies which are ineffective if delayed, and in accidents, quick action may prevent very serious consequences. The purpose of these lessons is to give the home-maker a clear description of simple sick-room duties, a general knowledge of dangerous symptoms, and directions for first aid to the injured.

CHIEF TOPICS TREATED

THE SICK ROOM: Choice, Furnishing, and Care; Methods of Heating, Ventilation, and Lighting; Ethics of the Sick Room.

CARE OF THE PATIENT: The Bed; Changing Bed-clothes and Gown; Changing and Turning Mattress with Patient in Bed; Changing Patient from One Bed to Another; Care of the Hair, Mouth, and Teeth; Prevention and Cure of Bed Sores. Methods of Making the Patient Comfortable; Convalescence.

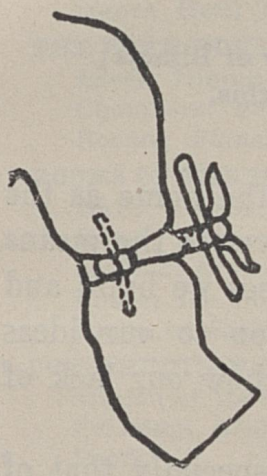


BATHS AND BATHING: Cleansing Baths in Bed; Foot Baths; Hot Baths; Hot Packs; Sponge Baths for Reduction of Temperature; Salt Baths; Bath Temperature Table.

SICK ROOM METHODS: Taking and Recording Temperature; Pulse, and Respiration; Recording Symptoms; Giving of Medicine; Enemas; Douches; Catheterization; Poultices; Sinapisms; Fomentations; Ice Caps and Compresses.

CONTAGION, DISINFECTION: Of the Room; Furniture, Utensils, Metals, Clothing, Excreta; Personal Disinfection; Precautions for the Nurse.

ASEPSIS, SURGICAL OPERATIONS AT HOME: Preparation of the Room; Appliances; The Bed; The Patient; After Treatment; Obstetrics; Preparation; Care of Mother and Child.

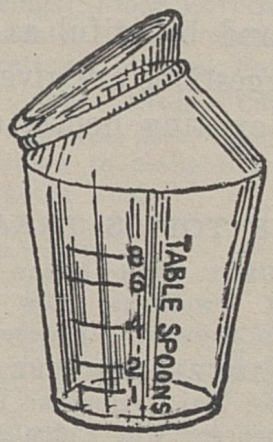


FOOD AND ITS ADMINISTRATION: Diet in Sickness and Convalescence; Cooking and Serving, Broths, Gruels, Drinks, Jellies, etc.; Menus; Importance of Dainty Serving; The Tray, Dishes, Linen, Decorations.

FIRST SYMPTOMS OF DISEASE: Colds; Grippe; Tonsilitis; Pneumonia; Tuberculosis; Typhoid Fever; Croup; Colic; Cholera Morbus; Contagious Diseases; Smallpox, Diphtheria, Scarlet Fever, Measles, etc.

FIRST AID TO THE INJURED: Scalds; Burns; Frost-bites; Fainting; Shock; Cuts; Sprains; Fractures; Poisoning; Asphyxiation; Drowning; Artificial Respiration.

BANDAGING: Bandage; Material, Size, Shape; Application of Bandages to Head, Jaw, Leg, Foot, Arm, Hand, and Finger; Slings.



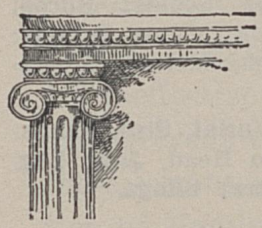
The House, Its Plan, Decoration and Care

BY

Isabel Bevier, Ph. M

**Professor Household Science, University of Illinois;
Author of U. S. Government Bulletins.**

We all recognize that the house is not the home as the body is not the spirit, but as the body serves as the means of expression for the spirit, so in the houses we build and furnish we give expression to our ideas and ideals of beauty or show our lack of them.



Because all life, and especially that of the young child, is so much influenced by its surroundings, much care should be taken to make the house attractive. Again the house should be the place of rest, comfort and inspiration as well as the workshop of the home industries. It should therefore be harmonious and beautiful as well as comfortable and convenient. Suggestions are given in these papers for the improvement of existing houses and for labor saving arrangements.

CHIEF TOPICS TREATED

EVOLUTION OF THE HOUSE: First Human Dwellings; Trees, Tents, Caves, Pueblos, Cliff Dwellings; Log Cabins; Greek Houses; Roman Houses; Swiss Houses; Japanese Houses.

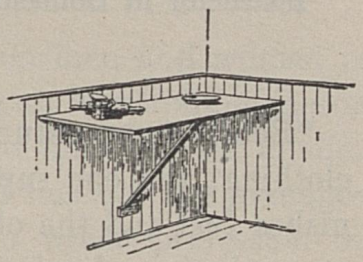
DEVELOPMENT OF THE AMERICAN HOUSE: Conditions Influencing American Architecture; Early Houses; Log Cabins; English Influences; Dutch Influences; Old Colonial Houses in the North and in the South; Limitations of Colonial Builders; Influence of the Carpenter; Merits and Deficiencies of Old Colonial Houses; Examples.

THE MODERN HOUSE: The House and the Home; The Site and Outlook; Style of Houses; Relation to Surroundings.

HOUSE PLANNING: Province of the Architect; Division of Space; Relation of Thoroughfares and Rooms; Use of Cross Section Paper in Making House Plans.

ENTRANCES: Essentials; Direct Entrance; Porch and Reception Hall; Porch and Vestibule Entrance; Side Porch Entrance; Entrance Hall; Plans Illustrating Entrances.

THE FARM HOUSE: Conditions on the Farm; Men's Sitting Room; Large Dining Room; Arrangement of Chambers; Separation of the Family Rooms; Plans.



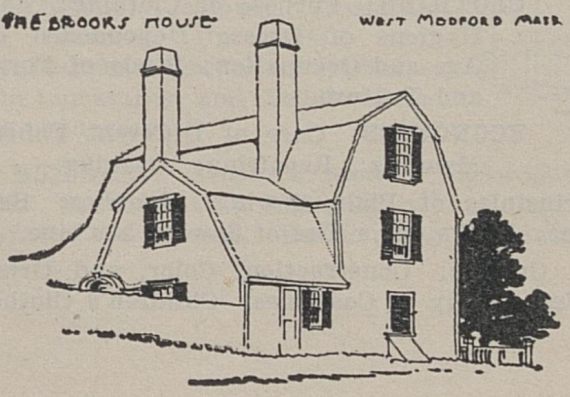
ROOMS OF THE HOUSE: Proportions; The Hall; Parlor; Living Room; Dining Room; Library; Kitchen Plan; Relation of Sink, Stove and Pantry; The Dinner Route; Ice Box, Closets; Second Floor; Kinds of Stairs; Apartments, Plans.

CONSTRUCTION OF THE HOUSE: Adaptability of Structure; Preparation of the Site; Foundation Walls; The Cellar; Superstructure; Framing; Walls; Floors; Chimneys; Doors; Windows; Porches; Roofs.

FLOORS: Advantages of Finished Floors; Kinds of Finish; Cost of Laying and Covering Floors; Shellaced, Varnished, and Waxed Floors; Kitchen Floor; Treatment of Old Floors.

DECORATION AND FURNISHING: Meaning of Decoration; Importance of Good Lines and Proportion in Rooms; Color; Harmony and Appropriateness; Quantity and Quality of Light; Principle of Gradation of Color; Decoration and Furnishing of the Various Rooms; Wall Coverings; Floor Coverings; Draperies; Furniture; Chairs of Chippendale, Hepplewhit, and Sheraton; Windsor Chairs; Morris Furniture; Mission Furniture.

CARE OF THE HOUSE: What Proper Care of the House Implies; Repairs and Minor Changes; New Windows; Change and Cleaning of Wall Paper; Changes to make the Kitchen More Convenient; The Repair Box; Use of Tools.



Textiles and Clothing

BY

Kate Heintz Watson

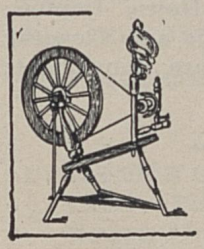
Instructor in Domestic Economy, Lewis Institute, Chicago

"Bodily temperature is chiefly maintained by food and clothing; the one supplements the other. The one furnishes fuel and the other saves it." But this subject has an aesthetic and artistic side as well as the practical; both are treated fully in this course. After a description of the textile fibers, processes of manufacture and fabrics, plain sewing and simple garment making are taken up, and the relation of clothing to health and utility outlined.

CHIEF TOPICS TREATED

FIBERS: Cotton; Linen; Woolen; Silk; Varieties and Structure of Each; Chemical and Physical Characteristics.

PROCESS OF MANUFACTURE: Primitive Methods; Preliminary Operations and Spinning; Weaving; Bleaching; Dyeing; Finishing of Fabrics.



FABRICS: Varieties; Adaptability to Use in the Home in Regard to Texture, Color, Quality and Price.

CLOTHING: Purpose of Clothing; The History and Hygiene of Dress; Dependence Upon Climate, Age and Occupation; Study of Form, Line, Color, and Texture.

ECONOMICS: Care of Different Fabrics; Cleaning; Mending; Repairing; Darning.

SEWING: Principles of Plain Sewing; Stitches; Seams; Fastenings; Hems; Tucks, etc.; Use of Sewing Machine.

GARMENTS: Cutting; Construction, Color, and Ornament; Study of Draperies; Study of Costumes; Children's Clothes.

The Study of Child Life

BY

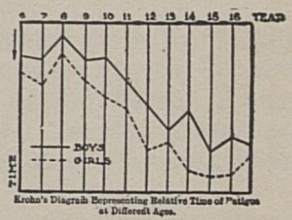
Marion Foster Washburne

Editor "The Mothers Magazine"; Author and Lecturer

The early influence of home life on men and women is universally admitted to be the largest controlling factor in their character, temperament and final success in life. There is no one who at some period has not the management of children. Motherhood is a whole profession in itself. No subject is more interesting and worthy of study. "Men and women are but children of a larger growth" — the same principles of practical psychology and ethics apply. Much has been done scientifically in the way of developing right methods of dealing with children. The principles best established are given in this course.

CHIEF TOPICS TREATED

HOW THE CHILD DEVELOPS: Its Condition at Birth; Normal Rate of Increase in Weight and Height; Muscular Control; Growth of the Bones, Teeth and Hair; Development of the Special Senses—Touch, Sight, Hearing, etc. Learning to Creep, Stand, Walk, Talk. Precocity and Its Dangers.



Krohn's Diagram Representing Relative Time of Fatigue at Different Ages.

FAULTS AND THEIR REMEDIES: Training the Will; Disobedience; Quick Temper; Sullenness; Deceitfulness; Jealousy; Greed and Selfishness; Laziness; Untidiness; Impudence. These Faults Analyzed as Moral Diseases, or Diseases of Immaturity, and Definite Remedial Procedures Suggested.

CHARACTER BUILDING: Froebel's Positive Philosophy, "Do" Rather Than "Don't." Influence of a Right Spirit. Building for the Future Rather Than for the Present. Harmonizing Influences. Dangers of Moral Precocity.

PLAY: Its Recognized Educational and Psychological Value. The Directed and Free Plays of the Kindergarten. Street Plays, with Songs. Home Amusements for Children of All Ages. Dances and Rhythm Plays.

OCCUPATIONS: The Kindergarten Occupations and Their Adaptation to the Home; Value of Domestic Activities; of Carpenter Work, and Other Forms of Manual Training; of Outdoor Work, Gardening, Farming, Care of Domestic Animals, etc.

THE PLACE OF ART AND LITERATURE IN CHILD LIFE: Influence of Pictures, Music, Statuary, The Drama; The Love of Reading: Shall It be Directed, and How? The Love of Nature as a Necessary Foundation for a True Appreciation of any Art.

CHILDREN'S ASSOCIATES: Value of Social Training; Why the Kindergarten Does What the Nursery Cannot Do; Evil Associates; The Sense of Social Responsibility—How It May Be Implanted and Sustained.

STUDIES AND ACCOMPLISHMENTS: Their Dangers and Advantages; Signs of School-Room Fatigue; When May the Languages be Most Readily Acquired? Dangers of Over-Stimulation; Music and the Un-musical Child; The Young Artist; The Young Inventor; The Young Scientist; Reaction of Expression Upon Thought and Feeling.

RELIGIOUS TRAINING: The Sunday School, What It Can and Cannot Do. The Young Theologian—What Shall We Do with His Questions? The Problem of Religious Training The Danger of Divorcing the Will and the Intellect in Early Life; Adolescence and Religious Excitement, This is a Period to be Guarded Carefully; The Application of Fundamental Educational Principles to the Teaching of the Bible.

The Care of Children

By

Alfred Cleveland Cotton, A. M., M. D.

Professor of the Diseases of Children, Rush Medical College, University of Chicago

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The first years of a child are the most important in his life from the physical standpoint, for then are laid the foundations of strength or weakness. As civilization carries us further from nature, knowledge must take the place of instinct, and we must rely more and more on artificial means to supply deficiencies. These papers give authoritative directions for the care of infants and children—particularly as to food and feeding.

CHIEF TOPICS TREATED

THE NEW BORN BABY: Normal Condition at Birth; Bathing; Temperature, Methods; Care of the Skin, Eyes, Mouth.

CLOTHING: Essentials for Health and Comfort at Different Seasons; Garments; Band, Shirt, Diapers, Stockings, Shoes, Shirt, Special Clothing.

SURROUNDINGS AND CARE: The Nursery, Heating, Temperature Day and Night; Effect of Too Hot Room; Sleep; Amount of Sleep at Different Ages; Putting the Child to Sleep; Objections to the "Soother"; Cause of Disturbed Sleep; Treatment; Exercise; Airing; Catching Cold; Baths; Care of Eyes, Nose, Mouth, Ears and Genitals; Regulation of the Bowels.

DEVELOPMENT AND GROWTH: Weight at Birth; Gain in Weight Under Different Conditions; The Bones; Closing of the Frontal Bone; Dentition; Order of the Appearance of the Teeth; Symptoms with Teething; Development of Special Senses; Creeping; Walking; Talking; Mental Development; Training; Physical, Mental, Moral.

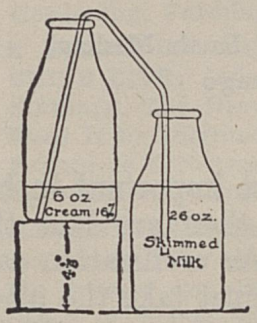
NATURAL FOOD: Natural Food Mother's Milk; Nursing; Time; Periods at Various Ages; Increasing the Supply of Milk; Diet of Mother; Vomiting; Colic and Constipation—Remedies; Weaning, Time and Methods. Suppiemental and Substitute Feeding. Wet Nurse.

ARTIFICIAL FEEDING: Six Essentials; Cow's Milk; Differences from Human Milk; Kinds of Cows and their Milk; Selection and

Care of Cow's Milk; Handling Milk and Cream; **Refrigeration,** Sterilization, Pasteurization.

MILK MODIFICATION: Imitation of Mother's Milk; Changes to be Made; In Sugar, Fat, Acidity, Proteids; Cream; Milk; Sugar; Lime Water.

MILK FORMULAS: For the Early Months; Later Months; Healthy Infants and Sick Infants.



GENERAL RULES FOR FEEDING: Gradual Increase of the Strength and Amount of the Food; Conditions Determining Rate of Increase; Change in Case of Indigestion or Sickness; Care of Bottles, Nipples; Warming the Milk; Raw, Pasteurized and Sterilized Milk; Position of Infant; Time to be Allowed for Feeding; Intervals for Feeding; Regularity; Feeding at Night; Value of Water; Rectal Feeding; Inunctions.

OTHER FOODS: Farinaceous Foods; Gruels and Jellies; Barley; Oatmeal; Arrowroot; Farina; Rice; Wheat; Bread; Their Effects and Purposes; Patent Infant Foods; Beef Juice, White of Egg, Orange Juice; Prune Juice, etc.

FOOD DISORDERS: Overfeeding—Causes and Results; Changes of Food Required by Special Conditions and Symptoms; Vomiting, Colic, Curds in Stools, Constipation, Hot Weather; No Gain in Weight; Broken Sleep; Fever; Acute Indigestion; Diarrhoeal Attacks; Rickets; Scurvy; Malnutrition.

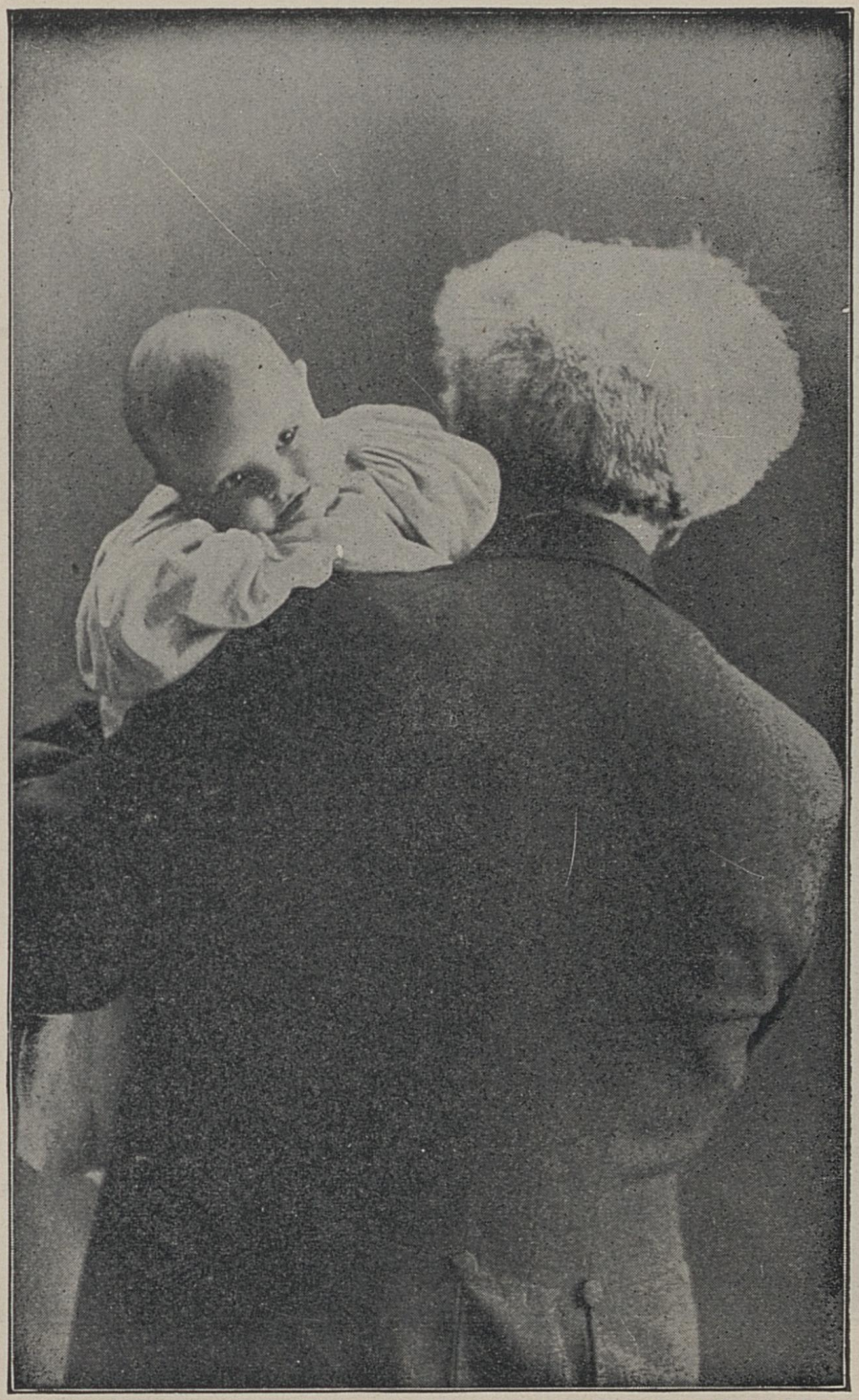
FEEDING DURING THE SECOND YEAR: Weaning the Child from the Bottle; Number of Meals Required; Preparing the Food; Diet for an Average Child from the Twelfth to the Eighteenth Month; Diet of a Child from the Eighteenth to the Twenty-fourth Month; Fruits Permissible; Giving of Water.

FEEDING OF OLDER CHILDREN: Diet for the Third Year; From the Third to the Seventh Year — Regarding Milk, Cream, Eggs Meats, Vegetables, Cereals, Broths and Soups, Bread and Crackers; Desserts, Fruits; Articles Forbidden; General Rules.

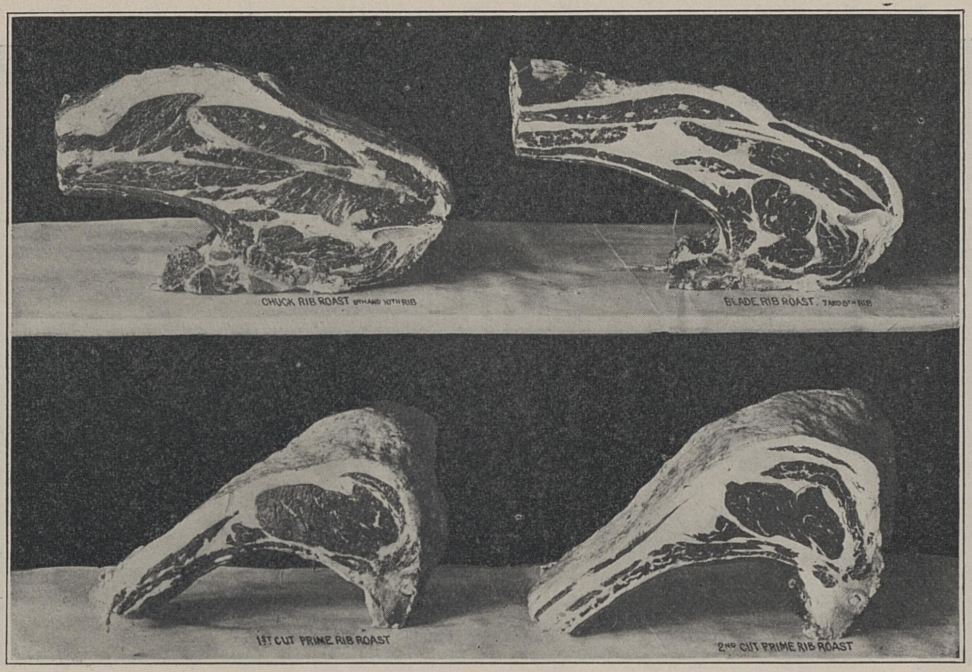
FOOD FORMULAS: Beef Juice by the Cold Process; Mutton Broth; Other Broths; Meat Pulp; Whey; Barley, Oat, Wheat and Rice Jellies; Albumin Water; Lime Water; Dried Bread; Eggs, Raw and Cooked; Peptonized Milk; Matzoon; Koumyss.

CHILDREN'S AILMENTS: The Cry — Use of Crying; Meaning of Different Cries; Nervousness; Indisposition; The Temperature; Colds and Sore Throat; Contagious Diseases; Symptoms of Measles, German Measles; Scarlet Fever, Whooping Cough, Chicken Pox, Diphtheria; Croup, True and False; Convulsions; Colic; Foreign Bodies Swallowed; In the Ear; In the Nose; Earache; The Medicine Chest.

THE FOLLOWING ARE A FEW PAGES FROM THE LESSONS



ONE OF DR. COTTON'S BABIES IN THE "BABY BAG"



ROASTS OF BEEF, NEW YORK MARKET.

From Photographs made for the Departments of Domestic Science, Columbia University.

HOUSEHOLD MANAGEMENT

Divisions in Economics

IN THE study of Economics there are two great divisions—production and consumption. Until within a few years, by far the lion's share of time and study has been given to the first of these divisions. It has been deemed sufficient for the securing of happiness and prosperity to a people to point out how the greatest degree of efficiency in *producing* wealth might be obtained. The manner in which that wealth was expended was considered less important. Recently a decided change has taken place. A conviction has been growing, especially among students or economics, of the equal importance of the other division, which covers *the use made of the money* after it has been acquired. This emphasizes the important place of the *home* in Economics as will be realized by those who consider how largely the home is the center of the consumption of wealth.

Place of Home in Consumption of Wealth

In former times the home was practically the entire economic world. Most of what was produced to meet the needs of the people originated there, while all of it found ready consumption within the family circle or by limited exchange. To-day the shop and factory have taken most of the productions and developed them

one by one, into large industries outside the home, such as the manufacture of dress goods and cloth of all kinds, carpets, bedding, candles and soap; trades, such as tailoring, shoe-making and millinery, all having their origin in the home. The preparation of food is almost the only work left to the home which may be called creative, unless we include the supreme work of developing men and women.

Yet with production passed practically out of the control of the home, we find the other branch of Economics, consumption, still chiefly confined there. Most of the wealth acquired outside is expended on either the home or the interests closely connected with it. Women thus become the main directors of these expenditures. It is generally conceded that most of them stand in great need of a better understanding of the importance of the work that is theirs, and of the principles which underlie all correct economy.

Economy

Two aims are of equal importance in the practice of economy; (1) to increase the income, and (2) to diminish the expenditures. The last contains possibilities of comfort of quite as high order as the first. There are, according to Devine, "three methods by which general prosperity may be increased; a better choice, a better production, a better consumption. In comparing the relative importance of the three methods it will be found that there are greater immediate possibilities in the third (a better consumption) than in either of the others, and that of the two that

remain, the first (a better choice) is more important than the second."*

Economic Position of Woman

In the light of all these facts it is a surprising thing that anyone can look lightly upon the share that is given to woman in the economic struggle. There are those who urge that the reason why women are finding the care of their homes less attractive than formerly is the fact that all which adds zest and is worth while is taken from them. Rather is it true that some things which demanded time and strength have yielded to more vital things, and there is now opportunity to perfect that which is left, with a better appreciation of its importance.

Office of the Wealth Expender

Devine further affirms that "it is the present duty of the economist to magnify the office of the wealth expender, to accompany her to the very threshold of the home, that he may point out, with untiring vigilance, its woeful defects, its emptiness, caused not so much by lack of income, as by lack of knowledge of how to spend wisely. There is no higher economic function than that of determining how wealth shall be used. Even if man remains the chief producer, and woman remains the chief factor in determining how wealth shall be used, the economic position of woman will not be considered by those who judge with discrimination, inferior to that of man. Both may in their respective positions contribute directly and powerfully to the advancement of general prosperity."

* Devine: *Economic Function of Woman.*

Use of Money

As women awaken to a realization of this truth, and bend their energy to acquire the knowledge and skill necessary to do their part more successfully, we shall begin to attain the degree of comfort and prosperity possible for us to enjoy. There is far more money earned in the majority of families than is wisely spent. The error is frequently careless expenditure, not sloth in acquiring, a *misuse* rather than *lack* of income. The old adage, "A penny saved is a penny earned," should be daily before the housewife. She should weigh in a less vague and general way the saying that "one cannot have his money and spend it too." Money has but a limited purchasing power: if it goes to gratify one desire, another must be denied. Few, very few, are able to satisfy all material desires. The mistake is made in giving too little thought to the various avenues of expenditure, the desire uppermost at the time being the one gratified, regardless of the relative importance of others. Combined with this are usually the failure to exercise foresight and the lack of sufficient knowledge of values to insure full money value for each outlay. "The woman who longs to get where she 'won't have to count every penny' will never have her longing satisfied until she makes every penny count."*

Business Side of Home-Making

As the economic importance of the home is more fully realized, the business side of home-making is emphasized. The home has a close and intimate rela-

*Miss Richardson: *The Woman Who Spends.*

tion to the business world in general. The housewife in her customary purchases comes in touch with retail trade of almost every variety and adds her contribution. If she makes use of the bank as the best medium of exchange, she shares in the interests of one of the large business enterprises. With a surplus to invest, she has to do with one or another branch of the business world in selecting the form of investment, and in looking after the income from it. To conduct any and all of these interests in the most efficient and successful manner requires as thorough training as for any other line of business. Only business-like methods can succeed. The reason why so many women fail at just this point is from a lack, in their early life and education, of the training which develops business ability.

HOUSEKEEPING A PROFESSION

Initiative

Housekeeping ranks among the professions as truly as any other occupation. It is more than a trade, since one who works at a trade performs each day the task assigned, the work being planned and directed by another. Thus little of the worker's energy is expended in deciding his activities. It is the *director* who must possess and exercise the power to guide; his work being to initiate, plan and direct. This requires larger capacity and ability than is required of the one who merely practices a trade.

It is the work of the housewife to initiate, plan and direct the business of the house. The woman who considers this work as the opportunity to assist

in sharing the responsibilities of the wage-earner, and in developing the powers of those making up the family, has grasped the truth concerning the possibilities of her work.

Need of Education

There should be no more question as to the need of education and training for the woman who *selects* the food, clothing and works of art which minister to the highest welfare of a family than there is for the need of study on the part of the farmer, the manufacturer, or the artist who produces them.

Estimation of Values

Everywhere training is showing its benefits in the greater efficiency and skill of those who take advantage of it. Women will never be able to spend money so as to bring adequate results, until they have in some way acquired a broad training in the estimation of values. The word of the salesman is a poor guide, yet one who has had no training to aid her is unable to select for herself any more satisfactorily. Houses which are turned over to "experts" are usually striking witnesses of abundant expenditure, but pitiably fail to convey to eye or heart the refreshing individuality or the satisfaction to be realized in the cultivated woman's home.

Education of the Home-Maker

The fullest, most completely rounded education is none too good for one who is called upon to use and impart so varied information as is the housewife. The study of science is especially practical for one who aspires to master all the things that come within the range of her work. A knowledge of chemistry is

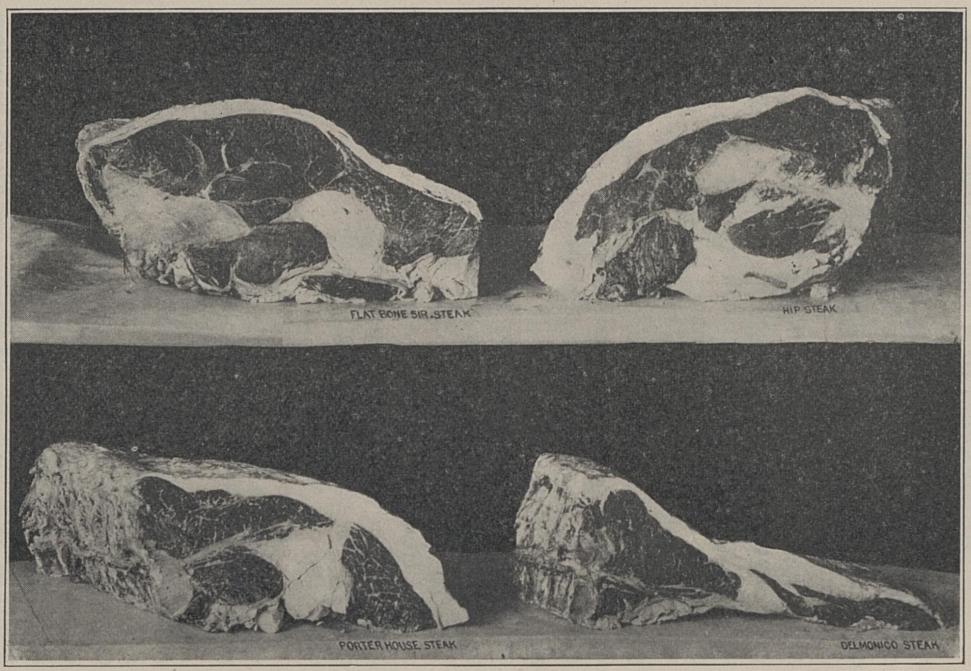
necessary to an understanding of food composition, of cooking, cleaning, etc. The laws of physics are as closely related. For the mother, modern psychology is an indispensable study, if she is to understand her child, and wisely guide its development. If this knowledge may not be secured in school, a great deal may be done to supplement such training. Study in this course should do much along this line.

Practice Necessary

In addition to the knowledge gained through study, there should be a liberal amount of *practice* in the various duties before one assumes the care of a house. Unfortunate the home where the practical experience all comes after marriage. It comes at the hardest of periods and is unjust to any man. In no business can failure be graver or the results more serious. The fact that some very efficient housekeepers have evolved from unpromising beginnings is no argument. Such are, without exception, most eager for their daughters to receive training, since they know by dear experience its value.

Housekeeping on a Businesslike Basis

Much of the present aversion to household duties would vanish before adequate preparation to perform them. The American Kitchen Magazine published, in January, 1901, some suggestions of leading men on the general subject of *Housekeeping on a Business-like Basis.* Some of their remarks are significant. One says: "Whenever one's knowledge of a subject has passed the stage of drudgery and becomes a science, its performance immediately becomes a pleasure. The ability to do a thing in the highest known perfection,

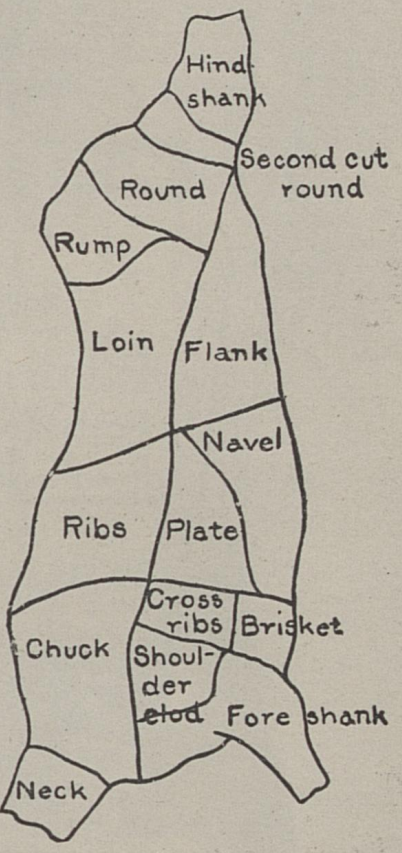


CUTS OF BEEF STEAK, NEW YORK MARKET

Courtesy of the Department of Domestic Science, Columbia University

beef. The *neck* is best used for mince meat. Prices on all meats differ too widely to make it possible to state with accuracy for all places, but that we may be guided somewhat by price in estimating values, average prices will be given. For this cut 8 cents a pound is an average price.

The Neck



SIDE OF BEEF, U. S. DEPT AGRICULTURE.

The Chuck

The *Chuck* lies just behind the neck, including the first five ribs. This cut may be used in a variety of ways, as cheap steak, roast, pot roast or stew. Several of the cheaper cuts indicated as possible roasts or steak cuts were formerly used much more commonly than now for such purposes. As our country has grown more prosperous there has been a great increase in the demand for the better cuts until many markets are forced to buy extra loins, etc., to meet the demand. A very fair small one rib roast may be cut from this portion. The chuck sells for about 12 1-2 cents a pound.

The Ribs

The *Ribs* are used chiefly for roasts and constitute the best of the fore quarter. The portion lying nearest

A LIVING ROOM AND LIBRARY COMBINED.
View Looking Towards the Fireplace, Plan No. 5, Page 70.

the ordinary spots on the wood-work; if stained, alkali will perhaps have to be used and the place re-painted.

Plaster

Plaster of Paris should be kept on hand as it is convenient for filling up cracks and mending various articles. As it hardens very quickly, some deftness is required in using it. A very little vinegar added to the water will keep the plaster from hardening quickly.

Eternal vigilance in little things is the price paid for small repairs. One must feel it is worth while to mend a broken lock, or oil a squeaky door, or polish the furniture, if one would keep the house looking well.

HOUSEKEEPING

Housekeeping as a Profession

A word more instead of a section must be said in closing about the care of such a house as is described in these pages. Happily the days are passing when the feeling prevails that "anyone can keep house." We have been a long time in learning that housekeeping is a profession for which intelligent preparation is demanded. The woman who attempts to usurp the authority of the trained nurse in charge of the patient does so at the risk of the patient's life. Results quite as disastrous to the life of the household may be expected from the woman ignorant of the first principles of household management and care.

Proper care of the house implies:

Essential

1. An intelligent conception of the construction of the house.

2. Some acquaintance with appliances for heating and lighting.

3. A knowledge of the sanitary aspects of plumbing.
4. A knowledge of values relative and absolute.
5. A knowledge of materials used in the home.
6. That attitude of mind which finds pleasure and satisfaction in a well-cared-for house.

The Mistress of the Home

The leader of the orchestra must understand the various instruments if he would blend their tones in a pleasing harmony; so the mistress of a home must have some definite knowledge of the machinery of its various parts if she would manage them successfully. It is worth while to know enough about the heating system to save an explosion by simply opening a valve, worth while to know enough about the furnace to be able to save fuel by closing the drafts, worth while to be able to buy intelligently the food, silver, china, linen, and glass needed in a home that the money, of which there is rarely an abundance, be not squandered for poor materials.

Drudgery

The woman who announces that housekeeping is drudgery and that she keeps as far away from it as possible, thus confesses that she has been unequal to her task. To such it must ever be drudgery, but to her who understands the possibilities and satisfaction in a well-ordered house and gives herself to a conscientious and intelligent study of its problems, it gives an insight into and an understanding of people and things; it provides a place for the application of science, economics, ethics and aesthetics and yields the satisfaction of achievement and the gratitude and love of those who have shared the benefits of such a home.

coal 76 pounds. Damp wood is a much poorer fuel than dry wood, because so much heat is absorbed and wasted in changing the water into steam.

The heat given off by a fuel is not the only point to be considered. In the cook stove, but a small portion of the heat given off by the solid fuel can be used for cooking, as most of it is radiated into the room or carried up the chimney. In the gas or oil stove, the flame may be applied exactly where it is wanted, so that the proportion of heat which can be used is much greater. Moreover, the flame can be shut off instantly when wanted no longer and all expense stopped. On the other hand, the range usually serves to heat the water of the hot water system, incinerate garbage, and in winter helps to heat the house.

FOOD

Having the fire well under way the housekeeper turns her attention to the breakfast. A great variety of chemical actions may here be considered. In the first place, why must we "eat to live?"

Why We Must Eat

Wherever there is life, there is chemical change; and as a rule a certain degree of heat is necessary in order that chemical change may occur. Vegetation does not begin in the colder climates until the air becomes warmed by the heat of the spring. When the cold of winter comes upon the land vegetation ceases.

Since many animals live in temperatures in which plants would die, it is evident that they must have some

have not such a decided effect, but they make the wool harsh and less flexible.

Linen resembles cotton and silk is much like wool in the resistance to chemical action, but the linen is more affected by the alkalies than cotton and silk is more acted on by acids than wool.

Fig. 18. Sections of Ordinary and Mercerized Cotton Fibres.

Mercerization

That cotton fibre is not seriously affected by alkalies is shown by the process of mercerization. In this process, patented by Mercer in 1852, the cotton threads are treated with a strong solution of caustic soda while under tension. The fibres lose their twisted and hollow shape and become more rod-like and nearly solid, as shown in Fig. 18. The threads have a tendency to shrink considerably, but are prevented by the tension. This and the method of manipulation gives the mercerized fabric the characteristic gloss somewhat resembling silk.

Soaking

In laundering, the best practice seems to be to soak the white clothes at least, in cold water or in luke-warm suds. The badly soiled portions may be soaped and rolled tightly to keep the soap where it is

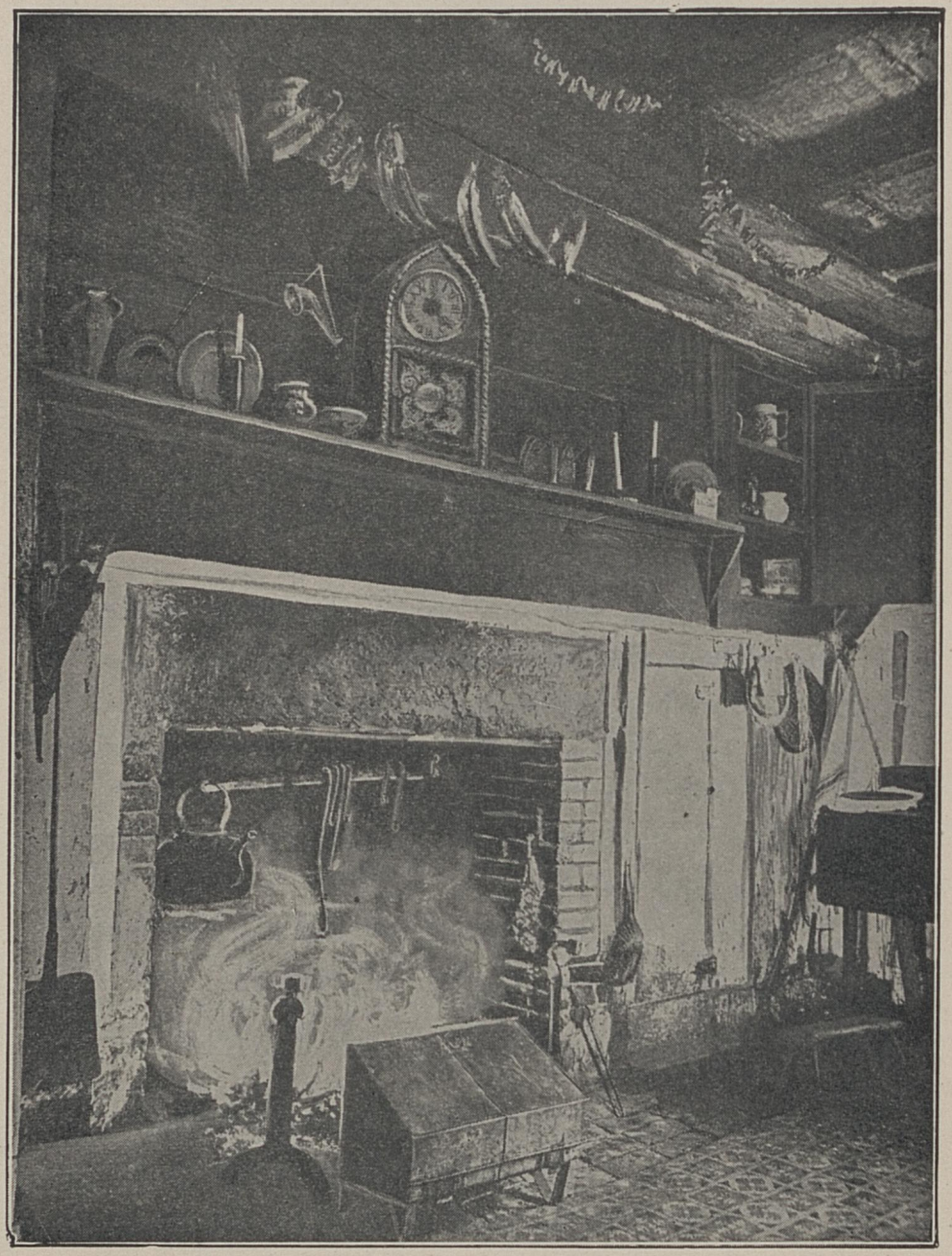
CHEMISTRY OF THE HOUSEHOLD.

PART III.

Read Carefully. Place your name and address on the first sheet of the test. Use a light grade of paper and write on one side of the sheet only. *Do not copy answers from the lesson paper.* Use your own words, so that your instructor may know that you understand the subject. Read the lesson paper a number of times before attempting to answer the questions.

---

1. What properties of "cream of tartar" make it suitable for baking powder?
2. Explain how a candle is a gas factory.
3. What conditions must be present for an explosion to take place?
4. What is "cooking soda?" How does it differ from washing soda?
5. What is the principle of the Davy safety lamp?
6. Describe the manufacture of coal gas.
7. How is water gas made? What objectionable features has it?
8. What is "quick lime" and what are its uses?
9. How is electricity produced in a voltaic cell?
10. What does the chemical formula H_2SO_4 indicate?



NEW ENGLAND KITCHEN OF THE OLDEN TIME

AMERICAN SCHOOL OF HOME ECONOMICS

CHICAGO

January 1, 1907.

My dear Madam:

Cookery is so old a story to many women that they find little interest in it. Others, though they enjoy cooking and are constantly devising new ways of preparing food and seeking new recipes from their friends, never learn anything of the chemical composition of foods or the reasons for the processes they carry on daily.

Comparatively few have yet studied cookery as they study other subjects, getting at its fundamental principles and grouping its varied formulas in a few general divisions.

In these lessons the attempt has been made to reduce cookery to its lowest terms. It would be impossible to tell the whole story of the art of cookery in so few pages, but by concentrating we are better able to view the subject as a whole. The aim has been to lay a foundation with which each student may become familiar easily and upon which she may build a system of cookery in accord with modern scientific investigation and yet adapted to her own conditions.

For those who have had little or no experience in cooking, the order in which the topics are taken up will be suggestive and helpful--that is, the application of heat to foods, the use of water in cooking, cooking of simple foods as grains, vegetables, and meats, and last, the mixing and cooking of doughs and the making of the more complicated dishes. If possible, all the experiments should be performed, especially when

they are called for in the test questions. Keeping a note book will be found a great help in fixing experiences in mind and in preventing a repetition of mistakes.

Most of our present system of cookery has been derived from the experiments of the generations of housekeepers behind us, but there is no reason why the housekeeper or cook of to-day should cling to the traditions of the past if she can devise a better way. It is hoped that these lessons may induce each student to observe, to adapt, to experiment. New life is put into the simplest routine of daily work if we are constantly watching processes and studying short cuts to better results.

Very sincerely yours,

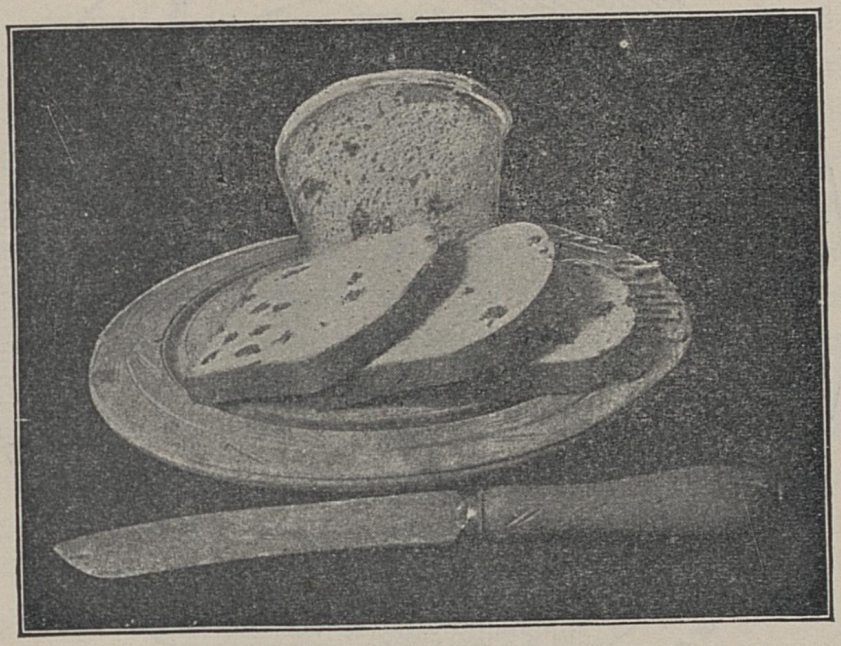
Anna Barrows.

Instructor

ened and thus retains the gas bubbles formed by the yeast in somewhat the same way that egg-whites hold air when they are beaten.

Order of Mixing

Old recipes for mixing yeast bread usually give directions for rubbing shortening into the flour and then



"BREAD CAKE" OR BUN BREAD.

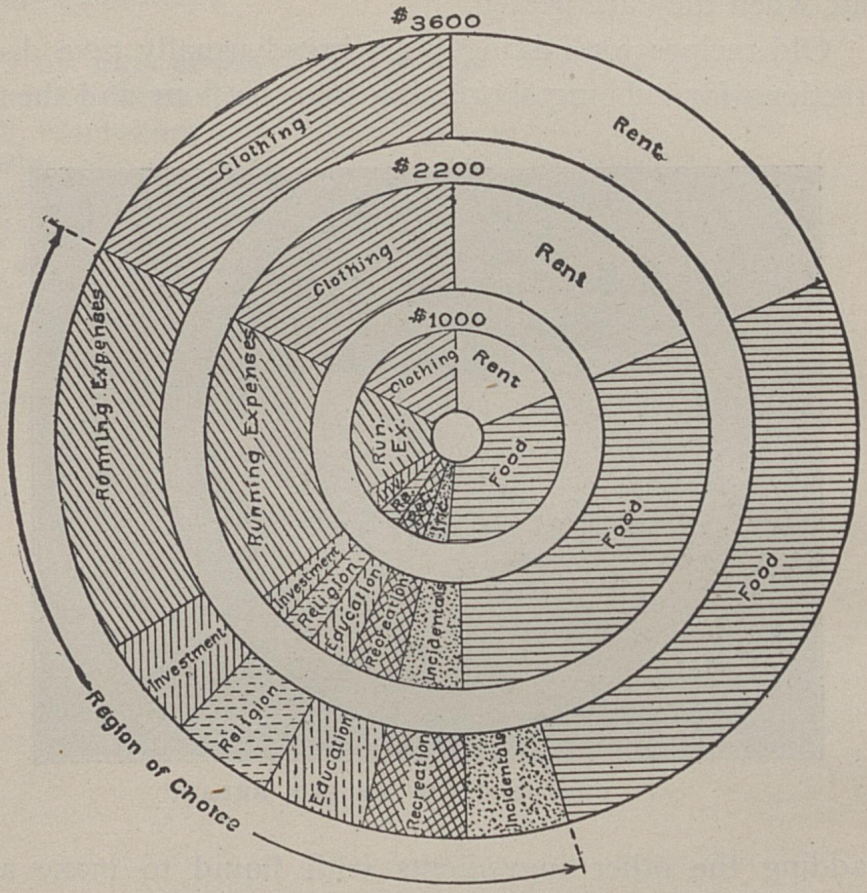
adding the other ingredients with liquid to make a dough that can be kneaded. The best authorities today reverse the order, thus saving time and energy and producing a better result.

Liquid Warmed

The liquid is warmed that the fat, sugar, and salt may readily blend with the other ingredients and that the dough may rise more rapidly. When it is below 100 F, or cool enough to avoid cooking the yeast, that

DIVISION OF INCOME CHART

Typical Family of Two Adults and Three Children



Running Expenses include Wages, Fuel, Light, Ice, Etc. With $1,000 Income the Children Would be Educated in the Public Schools.

The above chart was adapted from a large colored chart prepared under the direction of Mrs. E. H. Richards for the Mary Lowell Stone Exhibit on Home Economics.

FOOD AND DIETETICS

Problems of To-Day

THE problems of the household are more difficult to-day than they have ever been, for each advance in science, each modern invention, has brought in its train new responsibilities and new duties. In every department of the administration of the home more knowledge and skill are required than ever before. With the increase of conveniences has come increased care. Standards of living have changed as well, and greater perfection in all household service is demanded of the home-maker.

We still carry on in the household many of the numerous trades that were formerly a part of the home life, as cooking, cleaning, laundry work, sewing. At the same time more close supervision of the life of the children, mental, moral and physical, is required; more knowledge is needed to control materials if we would have that power over our environment which makes us the masters and not the slaves of our belongings; and the social demands upon time and strength can not be ignored.

The Simple Life

If to-day we would lead "the simple life," it must be as a result of determined effort, often in the face of more or less conscious opposition on the part of relatives and friends and of society in general.

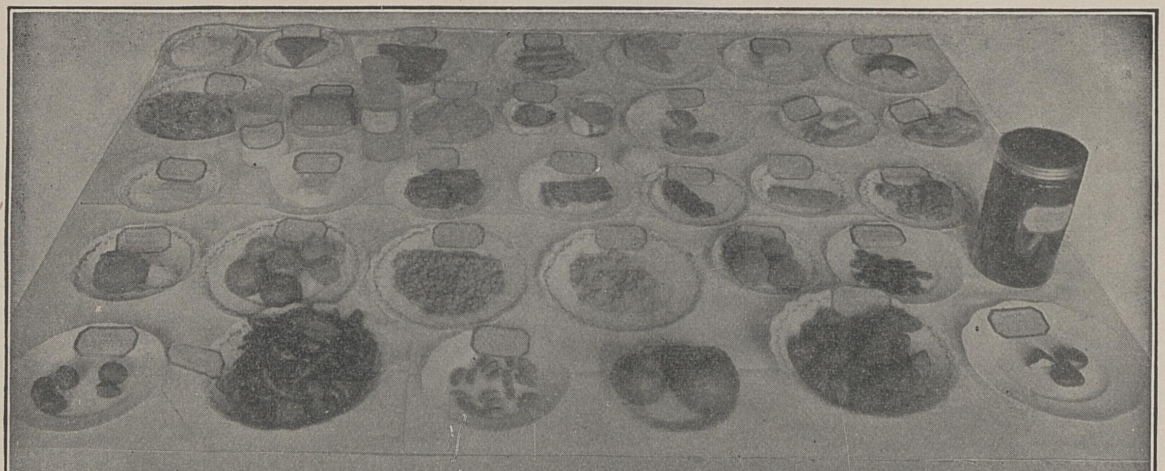
Essentials and Non-Essentials

Yet a simpler life is not to be attained by ignoring the results of science, and refusing to apply the knowledge made available by the investigator; but rather by making use of every help that will give knowledge of the materials with which we work, that will cultivate the power to distinguish between the essential and the non-essential, and that will give control of the situation.

The Food Problem

The food problem is perhaps the most difficult of all the physical problems that present themselves in the household, partly because it is so vital to the welfare of the family, and partly because it is so inclusive. The food question once meant the providing something palatable and presumably wholesome at a cost within one's means. To-day it implies a knowledge not only of the cost and nutritive value of food materials, their composition and digestibility; but of the balanced ration, the proportion of different food principles necessary for perfect nourishment, and of the way in which this proportion should be varied to suit the needs of the child or of the aged, of the laborer, or of the student. An understanding of the principles involved in the preparation of food is demanded, as well as a knowledge of food adulterations that will insure pure food materials.

The importance of the question can scarcely be exaggerated. Mrs. Ellen H. Richards tells us that "the prosperity of a nation depends upon the health and morals of its citizens; and the health and morals of



DR. FISHER'S "STANDARD PORTIONS" OF COOKED FOODS

100 Food Units (Calories) Each *

Prepared at
Lewis Institute, June '08

KEY

White Bread 1.3 oz. Corn Bread 1.3 oz. Brown Bread 1.5 oz. Graham Crackers 0.82 oz. Sponge Cake 0.89 oz. Frosted Cake 0.98 oz. Doughnuts 0.8 oz.
Corn Flakes 0.97 oz. Shredded Wheat 0.99 oz. Macaroni 3.8 oz. Baked Beans 2.6 oz. Caramel Custard 2.5 oz. Macaroons 0.82 oz. Lemon Pie 1.3 oz. Apple Pie 1.3 oz.
Milk 4.9 oz. Oat Meal Mush 5.6 oz. Egg 2.1 oz.
Butter 0.41 oz. Cheese 0.77 oz. Veal Leg 2.4 oz. Fat Roast Beef 0.66 oz. Lamb Chop 0.96 oz. Bacon 0.53 oz. Canned Salmon 1.5 oz.
Baked Potato 3 oz. Beets 8.7 oz. Canned Green Peas 6.5 oz. Succotash 3.5 oz. Peaches 10 oz. Raisins (seeded) 1.9 oz. Consomme 2.9 oz.
Olives 1.1 oz. Pickles 14.6 oz. Almonds 0.55 oz. Apples 7.3 oz. Strawberries 9.1 oz. Chocolate Creams 0.9 oz.

* Data from "A Graphic Method in Pratical Dietetics" by Irving Fisher, Ph. D.

"DUST GARDEN" SHOWING ABUNDANT GROWTH OF MOLDS

Made by a Member of the A. S. H. E.

making some wind currents. If dust is present in this current, it will be stirred up to settle back, where it was before, or to be blown to some other place. The more dust or the stronger the wind, the surer it is that the dust will be carried along with the current.

Why Keep Free From Dust

But why should the housewife spend so much energy and time in trying to keep her house free from dust? All the dust elements we have seen so far are not likely to do her much harm. The ashes or other mineral dust may scratch the polished table or the brass ornaments and silverware, but not so long as it lies quiet. It is the moving grain of sand, not the still one, that scratches. The other ingredients, bits of dead animal or vegetable matter, may be disagreeable to think of, but they are of the same stuff as ourselves, our clothes, our furniture. If this dead matter were all there is to dust, no one would ever have heard of the science of bacteriology.

Familiar Experiences

Many of the daily occurrences in the home give rise to questions which may be readily answered if we will but turn our kitchens into laboratories and try some simple experiments.

Perhaps you forgot to change the water in a vase of flowers and it stayed there a week. How did it smell when you poured it out? How did the stems that had been in the dirty water feel?

Possibly when you left home for a week's visit last summer, you knew the ice was all gone from the refrigerator, but you forgot to empty the pan underneath.

Thus the generations are continued and the individuals multiplied.

Requirements for Growth

Yeast requires food, oxygen, warmth, and moisture. Sugary substances are especially liked by the yeast which is used to make bread. This is a specially cultivated form of brewer's yeast. Yeast directly from

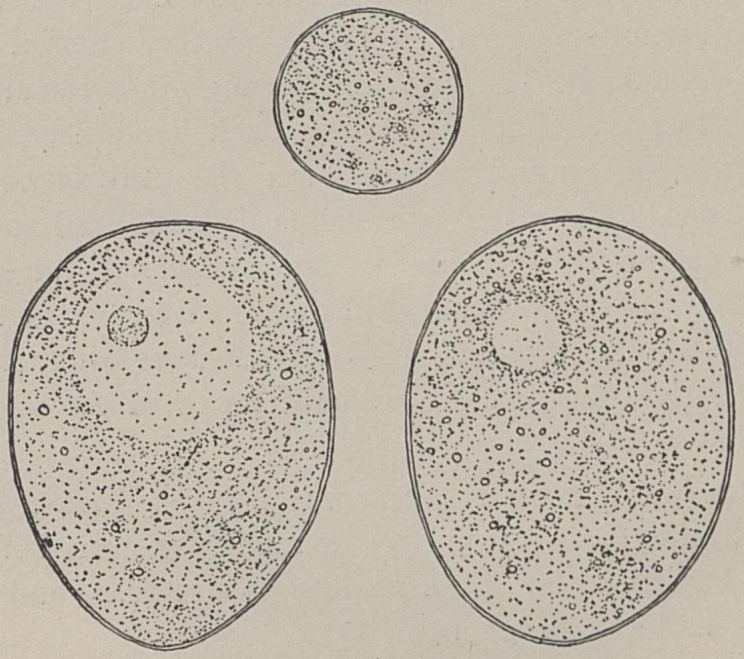


FIG. 22. TYPICAL FORMS AND APPEARANCE OF BREWERS' YEAST. (After Sedgwick and Wilson.)

the breweries is often used for breadmaking. It is while feeding upon these sugary solutions that the tiny plants bring about the chemical changes by which alcohol and the gas, carbon dioxide, are produced. The gas puffs up the dough and makes pos-

Products of Growth

Origin of Disease Germs

It is believed by some scientists that the commonly prevalent species of bacteria, harmless under ordinary conditions, may change their character when settled in thickly crowded centers of population where darkness, dampness, bad air, insufficient or poor food make filthy habits of life. If these then gain access to human tissues they may develop disease-producing power and be carried far and wide. In this way cholera, the "plague," and similar diseases, beginning in countries or sections of cities where human beings herd together with no pretense of cleanliness, are carried across seas and continents. This would show how necessary to the physical health of the world is the purification of "the slums," whether these occur at home or abroad. Other bacteriologists deny this hypothesis, but however the disease germs may have developed their evil ways, they never, so far as we know, reform of their own accord and become harmless, although unfavorable conditions may weaken their power or virulence.

FIG. 42. Typhoid Bacillus Showing the Many Cilla. (After Sedgwick and Wilson.)

Breeding Ground for Germs

The bacteria which are the cause of typhoid, diphtheria, or tuberculosis make a specialty of this work. The true parasitic disease germs affecting man must have human beings in which to propagate with any degree of success; so the *human body is the chief natural breeding ground of contagious disease germs.*

HOUSEHOLD BACTERIOLOGY

PART II.

Read Carefully.—Place your name and address on the first sheet of the test. Use a light grade of paper, write on one side of the sheet only, and leave space between answers. Make all experiments possible and read the lesson book a number of times before attempting to answer the questions. Answer every question fully. Do not be too general in statement. Give details wherever they will show your knowledge.

1. What is the objection to a common comb, drinking cup, etc., to promiscuous kissing on the lips, or to spitting on floors or sidewalks?

2. What is an infectious disease?

3. How does a case of typhoid fever show human carelessness and what should always be done to prevent its spread?

4. Through what avenues do germs attack the body?

5. What are some of the means by which the healthy body resists bacterial attacks?

6. What is a toxine? An antitoxine? A phagocyte?

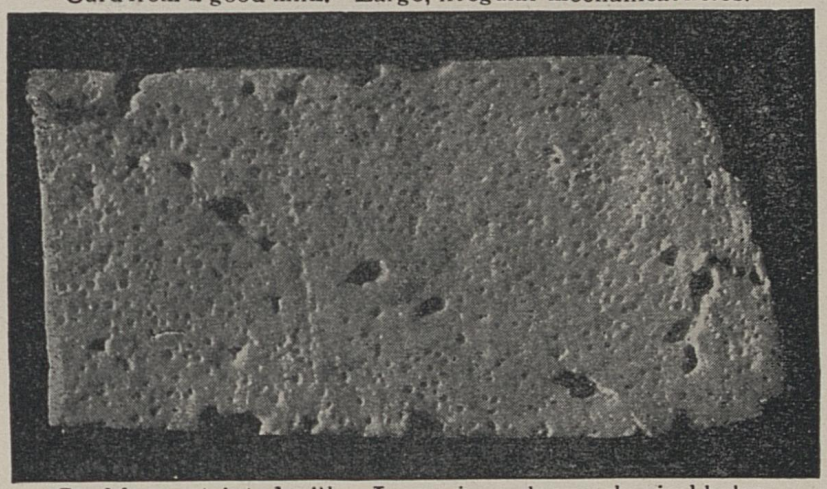
7. What is an antiseptic? A disinfectant? Mention some of each.

8. What disinfectants should the housewife use most freely?

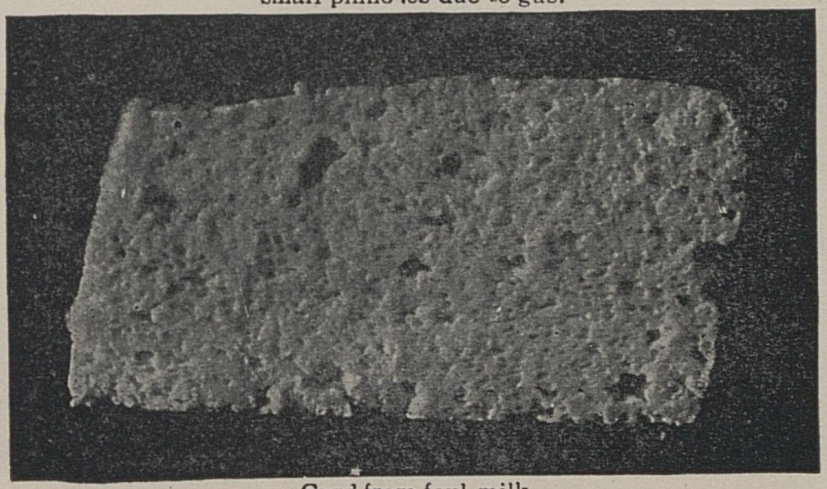
9. Where do disease germs multiply chiefly?

10. In what ways should a study of dust affect the housewife's (a) choice of methods in cleaning, (b)

Curd from a good milk. Large, irregular mechanical holes.

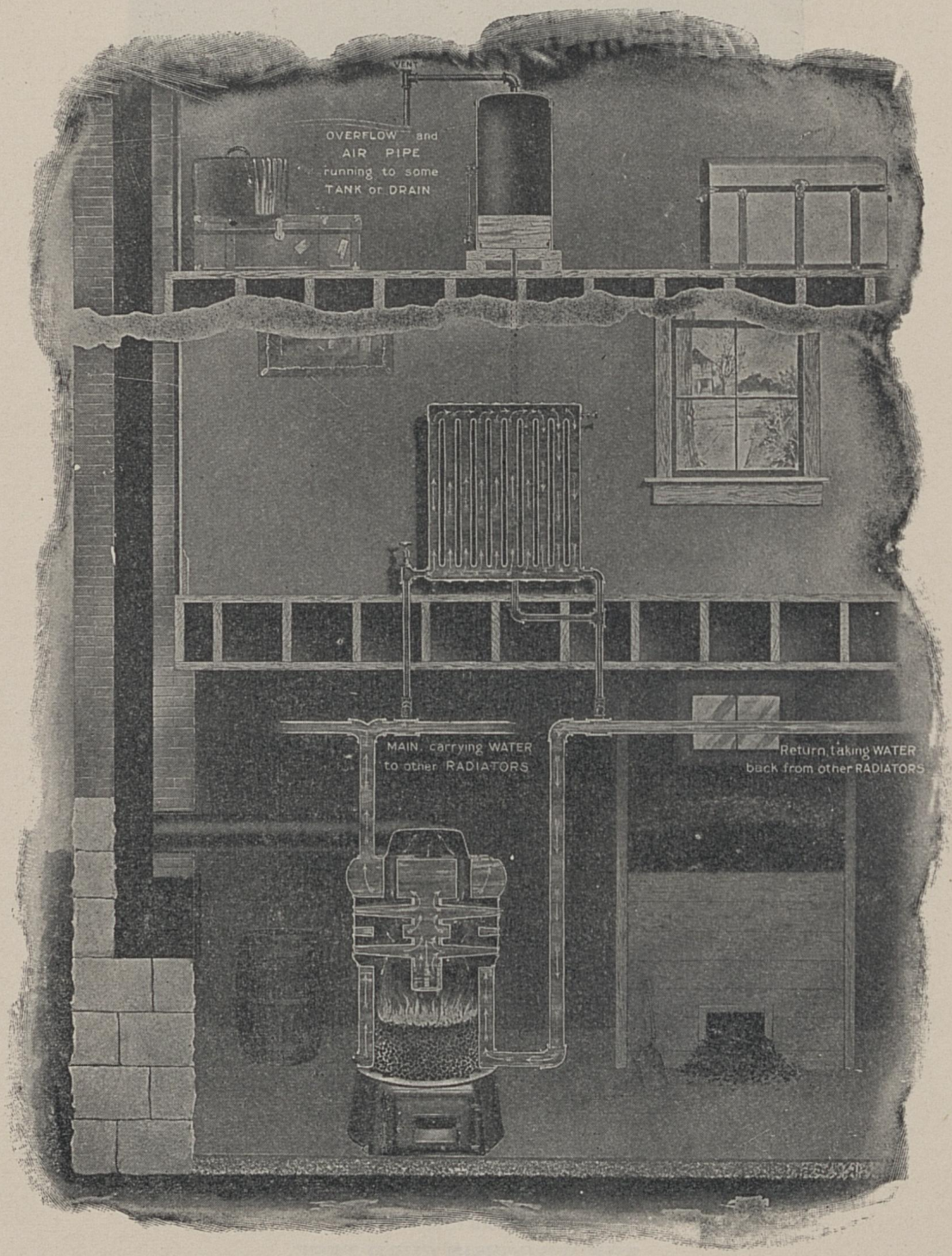


Curd from a tainted milk. Large, irregular mechanical holes; small pinholes due to gas.



Curd from foul milk.

THE WISCONSIN CURD TEST



HOT WATER HEATING SYSTEM, SHOWING CIRCULATION AND EXPANSION TANK.

living in certain sections most forcibly suggest why tuberculosis is now responsible for one-tenth of the deaths in the United States.

The science of bacteriology has laid the foundation of sanitary conditions and leads to a correct understanding of the preventive measures which tend toward health.

Because woman spends most of her time within the house, because she is the acknowledged and responsible director of that house; above all, because she is the *mother* of the race, should she understand what health conditions are and how they can best be obtained.

Ideals

It has been stated by authorities in sanitary science that there is little use to legislate further concerning public sanitation until the ideal of the individual housewife raises the standard of the private house.

Given a community of sanitary homes, the sanitary office and school house will follow.

Conditions harmful to man's health and efficiency are not only harmful to his life but also to that of his possessions, therefore economy as well as health requires that the house and all it shelters receive intelligent oversight and care.

To point out the relations of the house and its contents to man's requirements, that all may be made to increase rather than decrease his efficiency is the purpose of Household Hygiene.

and infest the house and its furnishings. Cracks should be filled. Putty, plaster of paris, sawdust and glue are all good fillers for cracks of different sizes and in different places. Any of them may in time wear out and need renewal. Very thick paint is a good filler.

Putty is whiting mixed with linseed oil. If applied to unfinished wood the inner surfaces of the crack or hole should first be touched with shellac. If this is not done the oil from the putty will be absorbed and make a visible darker line or ring. Perhaps wax is better.

By the "handy man," or boy, or by the woman who can use a few tools fairly well, large cracks can better be filled with small wedges of wood driven in tightly. These may be so well fitted and matched in color that they are not noticed. The fact should ever be kept in mind that "a crack is an abomination" because of its ability to store filth. In kitchens and pantries it is often true, as was laconically said by the superintendent of a large restaurant noted for its cleanness, "A crack means a cockroach." Too often in bedsteads or in the sleeping rooms a crack is an invitation for that "flat patterned time keeper" of which Dr. Holmes spoke, but which is in common speech, the bedbug.

Cracks and holes in pantries, food storage rooms, etc., often furnish nesting places for ants.

They, too, make it easier for mice to enter such places.

These few methods are surely sufficient to indicate the important parts of a house to be studied carefully by the progressive, sanitary housewife.

There is no *one* method which is best for all, therefore let each student make her room, her house, or some other building over which she may have control, her laboratory, in which she may experiment. When she finds a good method for her conditions let her keep to it until a better one presents itself. Perhaps the following notes may suggest the better way.

NOTES

From among the hundreds of tests returned by the students in Household Hygiene there are many suggestive illustrations of the principles set forth in each subject. A few of these from widely separated portions of the country seem to be of common interest.

This appendix will partly supply the need of Mrs. S., who asks: "Are there any printed reports of the different tests or any way of knowing the ideas of others taking the same course?"

A sleeping room is described as situated on the ground floor with one window opening into a partially enclosed space largely occupied by sewage-soaked earth from the sink drain. If other rooms are similarly located no wonder, as L. P. says, "It is not strange that there is not one healthy person in the family."

From the deck of a houseboat on the Mississippi during a trip of 1,200 miles, one writes: "I do not know where in New York you will get as healthy surroundings save in another houseboat. Our hold (cel-

Right Living

Live to accomplish something—not merely to exist.

To live means to eat, to work, to sleep, to be amused and refreshed after work.

Eat for satisfying legitimate hunger of the body cells —not only to please the palate.

Sleep for restoration of energy—see to it that such is the result.

Exercise is as essential as sleep—learn what and how much shakes out the dead ashes from the living coals.

Life processes go on best unwatched. "All the world's a stage"—enjoy the play.

Live for a worthy purpose—some incentive, some goal to reach keeps the traveller on the safe road.

Adapt habits to environments, control surroundings as far as possible to the great end—effective life.

Educate the young from the first to value life and health, to find happiness in right living.

Above all, believe that it pays to know the truth and to follow it.

Ellen H. Richards

be made. When the teeth are very soft, cement may prove the most economical filling even if it has to be renewed every year or two.

WHEN, HOW MUCH AND WHAT TO EAT

The composition, nutritive value and digestibilty of food have been treated in the lessons on *Food and Dietetics*, but it will be well to look at the subject from a different standpoint here.

Meals

By providing us with a stomach, nature evidently intended that we should take our food in meals. Some of the working people of the European nations partake of food five times daily, and those who attend the theater and late entertainments often may add an extra meal at midnight, but for most of us three meals a day seems to be the best plan. The stomach usually empties itself in about four hours, so that breakfast between 7 and 8, lunch between 12 and 1 and dinner between 6 and 7 gives it some rest between periods of activity. It needs this rest, for the stomach is not a continuous performance organ, like the heart. Moreover, stomach digestion goes on in stages. As the "psychic" or appetite juices decrease, the secretion brought about by the products of digestion continue, and the juice secreted is *adapted to the food being digested*. Eating between meals may upset the balance.

Eating Between Meals

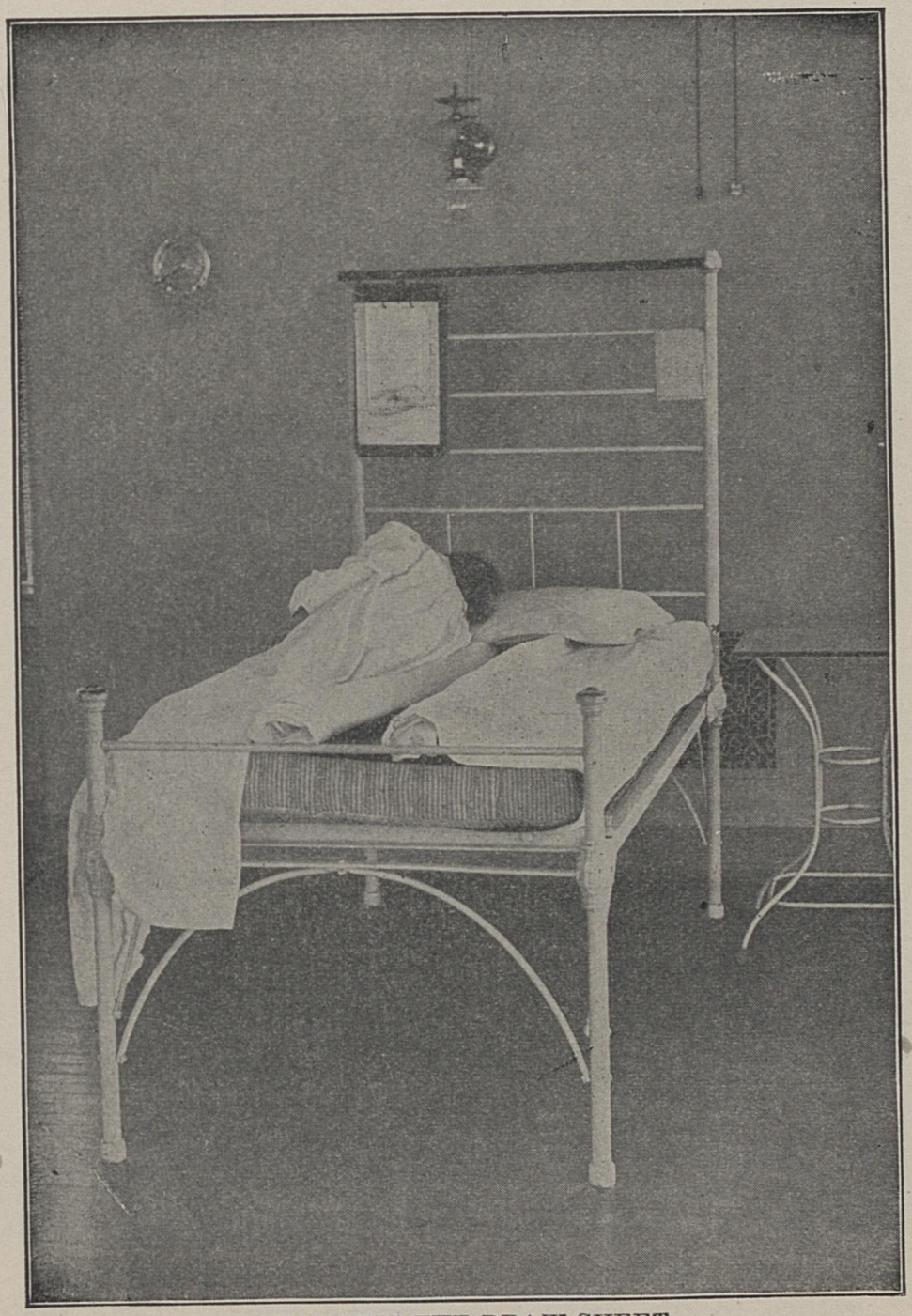
If one is really hungry, there is no objection to taking a little simple food *once* between meals, pro-

vided it does not interfere with the appetite at the regular meal time. It is the constant eating of candy, etc., to gratify the sense of taste that is disastrous to appetite and digestion. Young children usually need a lunch between meals. When a child is willing to eat bread and butter, it is probable that he needs food. Those of weak digestive power usually manage the same amount of food in four or five meals better than in three.

Regularity as to meal time is important. If for any reason one goes much over the regular meal time, the appetite may be too keen and there is an inclination to overeat and eat too rapidly, with resulting digestive disturbance. Unless there is a regular lunch to prepare, the housekeeper is very apt to become careless and eat at any time or wait until there is a "sinking feeling" in the stomach.

Time for Eating

For the secretion of the digestive juices a liberal supply of blood is needed, so that very active exercise which calls blood to the muscles should not follow directly after the taking of a full meal. *Moderate* activity, like slow walking after a meal, is without much effect, and may be favorable. In the same way, bathing should not immediately precede or follow eating a full meal, but a short cleansing bath has less marked effect on the distribution of the blood than severe exercise and is usually attended with no unfavorable results. We should not take a full meal directly after the loss of considerable water



CHANGING THE DRAW SHEET

turns around the ankle, or, if desired, continue up the leg.

Leg Bandage

The beginning of the leg bandage is placed obliquely across the leg above the ankle; a circular turn keeps it in place; then the bandage is inclined up the leg, and a turn taken around it. It is then brought downward, and another turn taken around the ankle. Successive turns are to be made, each one higher than the preceding, till the entire limb is covered.

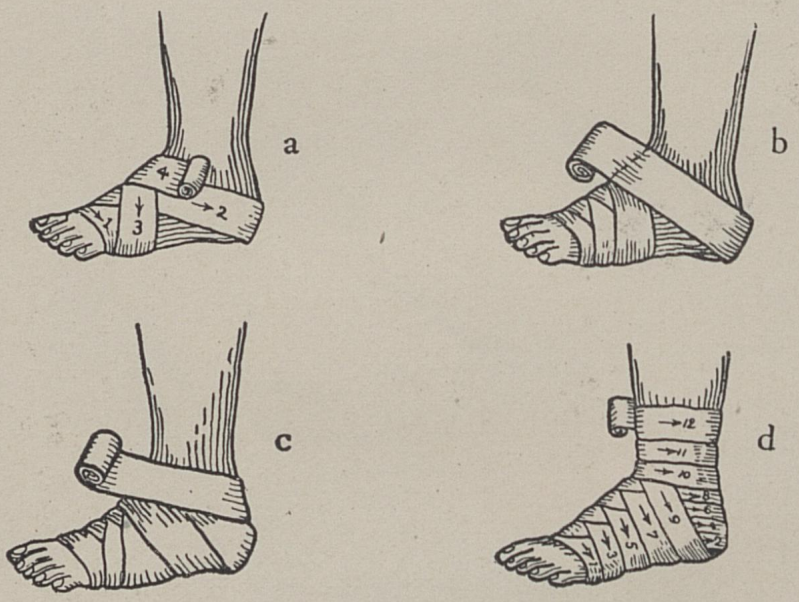


FIGURE 8 OF THE FOOT.

To bandage a hand begin at the top of the first finger and cover it by a succession of oblique circular turns, or figures of eight, to its base. Then make a turn around the wrist to keep these from slipping, and return to the root of the second finger. Lead the

ITALIAN WOMAN SPINNING FLAX
Spindle and Distaff.
From Hull House Museum. (In This Series of Pictures the Spinners and Weavers Are in Native Costume.)

the edge from wearing and stretching and is a stay for children's skirts and drawers where button holes are used and serves as a finish for the top of the band.

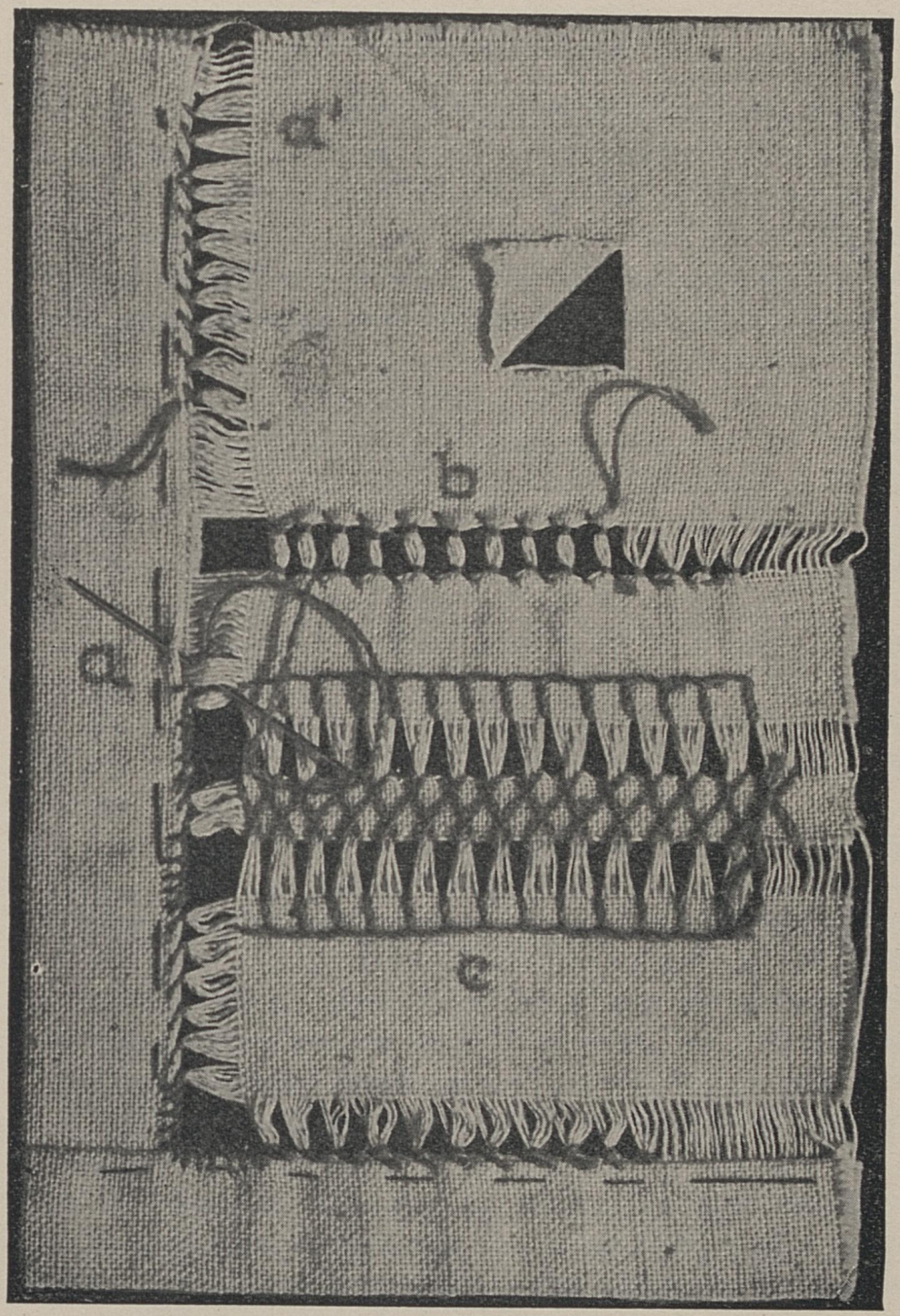
For flannel, pleating or gathers may be used to put fullness into a band. Two rows of gathering threads

DRAW TAPE FINISH FOR UNDER SKIRT

should be used and the stitches should not be too fine. The band should be made of cotton or at least lined with it to avoid clumsiness and prevent shrinking. Ruffles are set in hems, etc., in the same manner.

Drawing Tapes

In finishing the top of an underskirt, many like to dispense with the placket and fitted band. This may be done by using drawing tapes at the back. The upper edge is faced with a piece of material which should be bias in front to accommodate it to the curve, but may be straight across the back. Work a button hole



HEM STITCHING

a—Position of Needle; a'—Finished Hem Stitch; b—Ladder Stitch; c—Example of Drawn Work Finished with Loop and Cat Stitches.

in a sterilized pail through a cover of cheesecloth? Is the milk immediately strained, bottled and placed in a cooler which rapidly reduces its temperature to 40° F?

Importance of Refrigeration

Rapid cooling and refrigeration are fully as important as cleanliness in the production of safe milk, for

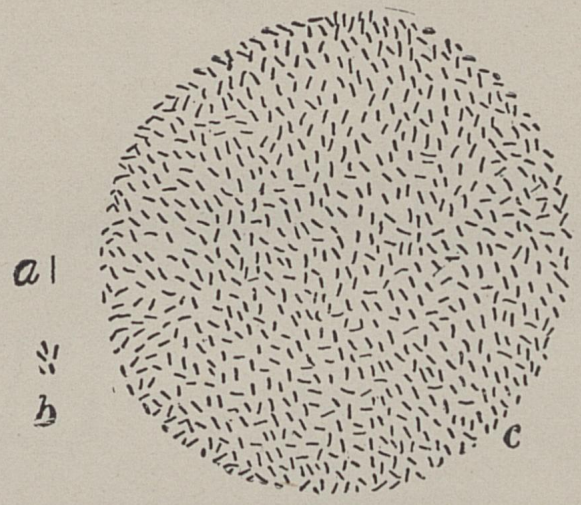


DIAGRAM SHOWING THE RATE OF INCREASE OF BACTERIA IN MILK.

a. Single Bacteria. *b.* Increase in 24 hours at 50° F. *c.* Increase in 24 hours at 70° F.

the few bacteria which are present in even the most carefully-cared-for milk multiply with enormous rapidity at 70° F., while they increase only about fivefold in 24 hours in milk kept at 50° F.

Certified Milk

The above enumeration includes most of the principles, the observation of which is absolutely necessary in the production of milk suitable for baby feeding. The source of supply should be investigated by

FOOD DISORDERS

Overfeeding

Overfeeding is responsible for many of the digestive disturbances of infancy. Among the causes of overfeeding may be mentioned irregularity as to time; thirst; perverted taste; improperly balanced or too concentrated a food; too rapid feeding, and general ignorance or carelessness on the part of the nurse. The usual result of *occasional* overfeeding is acute indigestion, with or without vomiting, belching, colic, diarrhoea, curds in stool, restlessness, broken sleep, fever or loss of weight.

Habitual overfeeding may cause dilatation of the stomach with loss of digestive power and all the symptoms of chronic dyspepsia, such as flatulence, colic, constipation or diarrhoea, loss of weight or general mal-nutrition.

Colic

Occasional colic or loose stools or even vomiting may call for nothing more than a temporary diminution of food and a dose of castor oil. In mild cases, the food may be diluted with about a fourth the volume of water, either in the nursing bottle before feeding or when the day's supply is made up. The quantity given may also be reduced somewhat. In returning to the original formulae the change should always be made *gradually*.

Persistent colic may be an indication of excessive proteids, the percentage of which should be reduced to the relief of both colic and diarrhoea, with the disappearance of curds from the stools.

Vomiting

Vomiting, or "spitting up," with or without diar-

who are punished are punished for some of these things. The remedy for these inconveniences is time and patience. The child, if left to himself, without a word of admonishment, would probably change his conduct in these respects, merely by the force of imitation, provided that the adults around him set him a persistent example of courtesy, gentleness, and cleanliness.

Real Faults

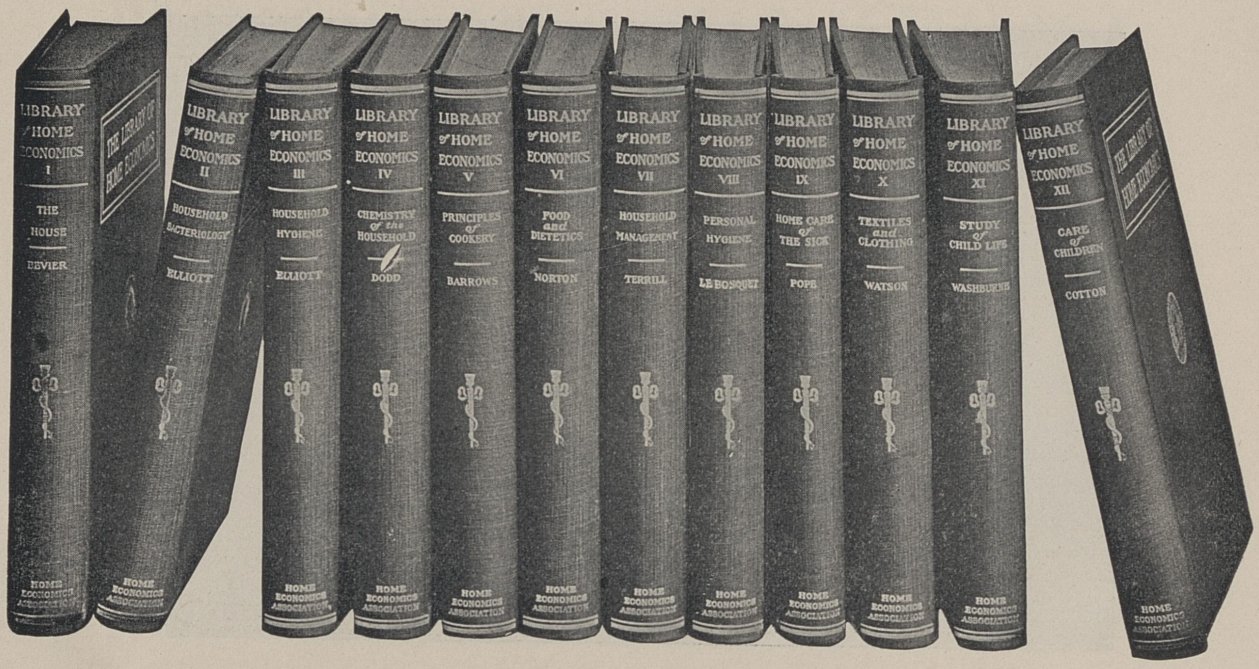
The faults that are real faults, as Richter* says, are those faults which increase with age. These it is that need attention rather than those that disappear of themselves as the child grows older. This rule ought to be put in large letters, that every one who has to train children may be daily reminded by it; and not exercise his soul and spend his force in trying to overcome little things which may perhaps be objectionable, but which will vanish to-morrow. Concentrate your energies on the overcoming of such tendencies as may in time develop into permanent evils.

Training the Will

To accomplish this, you must, of course, train the child's own will, because no one can force another person into virtue against his will. The chief object of all training is, as we shall see in the next section, to lead the child to love righteousness, to prefer right doing to wrong doing; to make right doing a permanent desire. Therefore, in all the procedures about

*Jean Paul Richter, "Der einsige." German writer and philosopher. His rather whimsical and fragmentary book on education, called "Levana," contains some rare scraps of wisdom much used by later writers on educational topics.

"CARITAS"
From a Painting in the Boston Public Library, by Abbot H. Thayer


LIBRARY of HOME ECONOMICS I
THE HOUSE
DEVIER
LIBRARY of HOME ECONOMICS II
HOUSEHOLD BACTERIOLOGY
ELLIOTT
LIBRARY of HOME ECONOMICS III
HOUSEHOLD HYGIENE
ELLIOTT
LIBRARY of HOME ECONOMICS IV
CHEMISTRY of the HOUSEHOLD
DODD
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PRINCIPLES of COOKERY
BARROWS
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FOOD and DIETETICS
NORTON
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HOUSEHOLD MANAGEMENT
TERRILL
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PERSONAL HYGIENE
LE BOSQUET
LIBRARY of HOME ECONOMICS IX
HOME CARE of THE SICK
POPE
LIBRARY of HOME ECONOMICS X
TEXTILES and CLOTHING
WATSON
LIBRARY of HOME ECONOMICS XI
STUDY of CHILD LIFE
WASHBURNE
LIBRARY of HOME ECONOMICS XII
CARE of CHILDREN
COTTON
HOME ECONOMICS ASSOCIATION

SCHOOLS USING OUR TEXTBOOKS

Colleges

University of Chicago
University of Illinois
University of Wisconsin
University of Missouri
University of Nebraska
University of Tennessee
Simmons College, Boston
Columbia University
Cornell University
Millikin University
Purdue University
Connecticut Agricultural College
Rhode Island Agricultural College
North Dakota Agricultural College
South Dakota Agricultural College
Kansas State Agricultural College
Michigan State Agricultural College
Colorado Agricultural College
Oklahoma Agricultural College
Montana Agricultural College
New Mexico Agricultural College
Utah Agricultural College
Brigham Young University
Drake University
Lindenwood College
Adelphi College
Illinois Woman's College
College of Industrial Arts, Texas
Mississippi Woman's College
Fisk University, Nashville, Tenn.

Normal Schools and Academies

Mechanics' Institute, Rochester, N. Y.
Stout Institute, Menominee, Wis.
Iowa State Normal, Cedar Falls
Wisconsin State Normal, Superior
Michigan State Normal, Mt. Pleasant
Minnesota State Normal School, Mankato
Illinois State Normal School, Macomb
Illinois State Normal School, Normal
Mass. State Normal, Salem
Mass. State Normal, North Adams
Thomas Normal School, Detroit
Normal & Industrial College, N. C.
Georgia Normal & Industrial College
Throp Polytechnic Inst., Cal.
California Polytechnic School
Lasell Seminary, Auburndale, Mass.
Garland Training School, Boston
National School of Domestic Arts and Sciences, Washington, D. C.
Fort Edward Collegiate Institute
Hampton Normal Institute
Chicago Normal Extension
Alabama Girls' School, Montevallo
Louisiana Industrial Institute
Webber Academy, Ogden, Utah
Snow Academy, Ephraim, Utah
County School of Domestic Economy, Menominee
Pennington Seminary, New Jersey
Mount de Chantal, West Va.
Ferry Hall, Lake Forest, Ill.
Miss Capen's School, Northampton,
Miss May's School, Boston, Mass.

High Schools

Chicago High Schools
Francis W. Parker School, Chicago
Los Angeles High Schools
McKinley High, St. Louis
Providence Technical High School
Springfield, Mass., Tech. High School
English High School, Worcester, Mass.
Fitchburg, Mass., High School
Greenville, Ohio, High School
Bridgeport, Conn., High School
Chippewa Falls, Wis., High School.
Kalamazoo Manual Training, Mich.
Aurora, Minn., High School
Burlington, Iowa, High School
Hinsdale High School, Hinsdale, Ill.
Rockford, Ill., High School
Sycamore, Ill., High School
Deerfield Township High School, Ill.
Princeton Township High School, Ill.
Murphysboro Township High School, Ill.
Consolidated School, McNabb, Ill.
High School, Salt Lake City, Utah
High School, Manti, Utah
High School, Provo, Utah
High School, Ogden City, Utah
High School, Raleigh, N. C.

Bureau of Education, Department of the Philippines

40 Sets "Library of Home Economics"

The "Library of Home Economics" has been purchased as a *reference work* by all prominent schools offering courses in home economics or related subjects, by many public libraries, and by over 5,000 progressive home-makers.

ANNOUNCEMENT

"LESSONS IN COOKING, THROUGH PREPARATION OF MEALS."

THIS new correspondence course in cookery has been prepared to meet the needs of home-makers who have had little or no systematic training in modern methods of cooking but who desire to perfect themselves and provide for their families simple, appetizing and wholesome meals, with the least expenditure of time, effort and money.

The ordinary cook book, with its numerous and complicated recipes, is of little help to the beginner. It does not answer the oft occurring question, "What shall I provide for today, tomorrow, for next week?" It gives no hint of wholesome food combinations or balanced diet.

The problem of home cooking is not only how to cook various separate dishes but how to prepare *whole meals*. The plan of "Lessons in Cooking" is unique and original in that a systematic course in cooking is taught through a series of graded menues, with detailed directions, not only for cooking the separate dishes, but also for preparing and serving *each meal as a whole*.

The course is divided into twelve parts, in each of which is given the recipes for a week's menu, typical of one month of the year—over 250 meals in all. In the first lessons, simple operations of cooking are described and gradually the more difficult and complicated recipes are introduced, leading to advanced work in the later lessons. Throughout the course the question of wholesome food combinations and balanced meals is carefully considered and special emphasis is given to economy of time and money.

The many menus for special occasions with recipes and directions and the numerous special articles on related subjects (see synopsis) are especially appreciated. The course presents the best modern methods and all the latest scientific discoveries relating to "Fine Art of Cooking."

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ENROLLMENT COUPON

AMERICAN SCHOOL OF HOME ECONOMICS, CHICAGO:

Please enroll me in your new correspondence "Lessons in Cooking," in twelve parts, to be sent one each month. I agree to pay the fee of $12.00; $1.00 herewith and the balance at the rate of $1.00 a month for eleven months ($10.00 cash in advance, if preferred). Money to be refunded if not satisfactory.

Signed _____

LESSONS IN COOKING, THROUGH PREPARATION OF MEALS

By Eva Roberta Robinson and Helen Gunn Hammel.

New Correspondence Course, in 12 Parts, each containing a week's menu, with detailed recipes and full directions for *preparing all meals;* also menus for all occasions, special articles, etc.
American School of Home Economics, Chicago.

Synopsis.

Part I. SEPTEMBER MENUS; Tables and Definitions; Processes in Cooking; General Directions; Setting the Table; Helpful Suggestions; Cost of Food and the Food Value of the Meals Served.

Part II. OCTOBER MENUS; Waiting on Table, With and Without Maid; Saturday Baking; Helpful Suggestions; Detailed Cost of Food and Food Value for Each Day, and Summary.

Part III. NOVEMBER MENUS; Dish Washing, With and Without Running Water, with Dish Washing Apparatus; *Thanksgiving Dinner* Menu, Recipes, Table Decoration and Serving; Dressing and Trussing of Fowls; Care of Fish; Methods of Cooking in Fats, Tests of Temperature, etc.; Cake Baking, Temperatures for Oven and Tests; Cost of Food and Food Value of Each Meal, and Summary.

Part IV. DECEMBER MENUS: Candy Making, Classes, Methods, and Recipes: *Christmas Dinner* Menu, Recipes, Table Decoration and Serving; Cost of Food and Food Value; Suggestions for Reducing the Cost of the Food Served.

Part V. JANUARY MENUS: Fuels and Fuel Economy, Coal, Coke, Wood, Gas, Gasoline, Kerosene, Alcohol, Electricity, Reading Gas and Electric Meters; *Informal Luncheon* Menu, Recipes, Table Decoration and Method of Serving: Fireless Cookers and Their Use; Cost of Food and Food Value; Reducing the Cost.

Part VI. FEBRUARY MENUS: Planning of Meals; A Balanced Dietary; Suitable Combinations; Economy; Suggestive Menu Chart; *School Luncheons;* The Worker's Lunch; Cost of Food and Food Value; Reduction of Cost.

Part VII. MARCH MENUS; Marketing and Cuts of Meat; *Chafing Dish Supper* Menu, Recipes, Table Arrangement and Decoration, Serving; Carving at Table; Amounts to Serve for Various Numbers; Helpful Suggestions; Cost of Food and Food Value; Reducing the Cost.

Part VIII. APRIL MENUS; Kitchen Conveniences and Appliances; *Formal Easter Luncheon* Menu. Recipes, Table Decoration, Serving; Helpful Suggestions, How to Seal Moulds, Shape Croquettes, etc.; Cost of Food and Food Value; Reduction of Cost.

Part IX. MAY MENUS: Care of Food in the Home; Care and Use of the Refrigerator; What to Do Without Ice; Care of Left-overs; Buying Supplies; Emergency Meals; *May Breakfast* Menu, Recipes, Table Decoration, Serving; Invalid Cookery; Cost of Food and Food Value; Reducing the Cost.

Part X. JUNE MENUS: Canning, Preserving, Jelly Making Recipes, Full Details of Various Successful Methods and Appliances; *Wedding Breakfast* Table Decoration, Menu, Recipes, Seating of Guests, etc.; Helpful Suggestions; Cost of Food and Food Value; Reduction of Cost.

Part XI. JULY MENUS; Pickling Fruits and Vegetables; Canning Vegetables, Recipes; *Picnic Dinner* Menu, Suggestions for Packing, etc.; *Children's Party* Menu, Recipes, Table Decoration, Methods for Serving; Cost of Food and Food Value; Reducing the Cost.

Part XII. AUGUST MENUS; Household Tests and Food Adulterations; *A Foraml Dinner* Menu, Recipes. Table Decoration, Service, etc.; Final Suggestions; Complete Index, Alphabetical with Cross References; Classified Reprint of Monthly Menus; Glossary; Bibliography.

Send 50 cents for Part I, 21 September Lessons, or ask for free Bulletin of sample pages. A. S. H. E., 506 W. 69th St., Chicago.

COURSES AND TUITION FEES

Home Makers' Courses	Cash in Advance Price	In Monthly Payments of $3 or $5
Regular Complete Course Instruction in all twelve subjects, 40 lessons; etc. Note "What the Tuition Fee Includes."	$43.20	$48.00
Food Course Instruction in Chemistry I, II, III; Cookery I, II, III, IV; Dietetics I, II, III, IV; Marketing; Digestion; Children's Food; etc.	22.50	25.00
Housekeeping Course Instruction in the House I, II, III; Chemistry I, II, III; H. Hygiene I, II, III, IV: Management I, II, III, IV; etc.	22.50	25.00
Motherhood Course Instruction in Study of Child Lite I, II, III; Care of Children I, II, III; Care of the Sick I, II, III; Textiles and Clothing I, II, III; etc.	22.50	25.00
Health Course Instruction in Bacteriology I, II, III; Household Hygiene I, II, III, IV; Personal Hygiene I, II, III; Care of Sick I, II, III; Care of Children I, II, III; etc.	22.50	25.00
Professional Courses		
Teachers' Complete Course Instruction in all twelve subjects, 40 lessons, Supplementary Work and Teaching of Domestic Science; etc.	48.60	54.00
Institution Management Complete Course Instruction in all twelve subjects, 40 lessons, Institution Housekeeping Supplementary Work; etc.	48.60	54.00
Teachers' Short Course Instruction in Chemistry I, II, III; Cookery I, II, III, IV; Dietetics I, II, III, IV; Digestion, Marketing; Textiles and Clothing I, II, III; Supplementary Work and Teaching of Domestic Science; etc.	24.30	27.00
Institution Management Short Course Instruction in Cookery I, II, III, IV; Dietetics I, II, III, IV; Household Hygiene I, II, III, IV; Laundry Work; Marketing, Inst. Housekeeping and Supplementary Work; etc.	24.30	27.00
Nurse's Short Course Instruction in Bacteriology I, II, III; Care of the Sick I, II, III; Dietetics I, II, III, IV; Care of Children I, II, III; Personal Hygiene II and Supplementary Study; etc.	24.30	27.00
Dietitians' Short Course Instruction in Chemistry I, II, III; Cookery I, II, III, IV; Dietetics I. II, III, IV; P. Hygiene II. III; Children's Food; Marketing and Supplementary Study; etc.	24.30	27.00
Complete Reading Course All 40 lessons sent one each week, as fast as progress is made. Brief reports returned on each of the twelve subjects. All privileges and use of all Departments included.	22.80	24.00

WHAT THE TUITION FEE INCLUDES

1. **LESSON BOOKS.** A complete series (15 to 40) for the course selected, to be sent as fast as the student proceeds with the studies.

2. **PERSONAL INSTRUCTION** by prominent teachers, authors of the lesson books or their assistants.

3. **THREE YEARS' TIME** allowed for completing the course, which limit will be extended for any good reason. The studies may be discontinued for a time and taken up again to suit convenience; monthly payments, however, cannot be deferred.

4. **ENGRAVED AND ENGROSSED DIPLOMA**—Crane's parchment bond, 16x21 inches, on finishing Complete Courses; certificates of the same design for the Special, Short and Reading Courses.

5. **ALL POSTAGE** on lesson books, letters, tests and Bulletins sent to the student.

6. **BUREAU OF INFORMATION.** All personal and household questions answered. The School has exceptional facilities for supplying expert assistance, not to be obtained otherwise.

7. **CIRCULATING LIBRARY DEPARTMENT,** containing over 400 books, reports, bulletins, pamphlets and articles. All books of merit, new or old, relating to the subjects taught, may be borrowed for the cost of postage. Advanced or special study in any subject may be pursued under the direction of specialists.

8. **READING COURSE DEPARTMENT.** Courses in literature, history, biography, nature-study, science, arts and crafts, social forms and usages, children's reading, etc. The books and pamphlets suggested may be borrowed for a small fee, and may be purchased, if desired, after reading, at a discount.

9. **CLUB STUDY DEPARTMENT.** Programs, suggestions and assistance given in the club study of home economics, sociology, civics, ethics, education, and all subjects that affect the home. Suggestions and criticisms given on papers.

10. **LECTURE BUREAU.** Manuscripts of lectures illustrated with slides or exhibits, loaned for the cost of sending and returning.

11. **PURCHASING DEPARTMENT,** giving discounts on books, magazines, apparatus, household appliances, etc.

12. **HOUSE BUILDING BUREAU.** Collections of plans, books and articles on house building, decoration and furnishing, loaned according to individual requirements.

13. **EMPLOYMENT BUREAU.** Assistance in obtaining positions.

14. **SCHOOL BULLETINS** published quarterly, giving reviews of new books, references, reports, articles of interest and the progress of home economics.

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REGISTRATION COUPON

Date .....

American School of Home Economics,
Chicago, Ill.

Please enroll me in your ..... *Course as per above, for which I agree to pay tuition fee as follows:* $..... *cash herewith, and* $..... *on or before the* ..... *day of each month until a total of* $..... *is paid in full.*

Name .....
(Mrs. or Miss)

Address .....

COMMENDATION

"These writers are recognized authorities....Simplicity of statement and clarity, brevity without sacrificing completeness are qualities carefully sought for."—*The Outlook.*

"Practically all the material needed by the home-maker who wants to know about the inside and the outside of her house and the health of those within it is to be found in the course. The lessons are easy to read and scientific without being technical."—*Good Housekeeping.*

"This is the first time that an attempt has been made to gather together the whole broad subject of home economics into one correlated series of lessons. They give an epitome of the kind and scope of instruction given on this subject at the present time."—*Boston Cooking School Magazine.*

"I cannot commend your work too highly—as I wrote one of my school friends the other day—I have found the course of the School of more practical benefit to me than any of my University Courses. It is a constant help and inspiration. It has not only returned one hundred per cent every year on the amount invested, but has yielded what cannot be estimated in dollars and cents—an added interest and joy in home-making as a profession. I shall never cease to be thankful that I had this help at the beginning of my housekeeping experience."—*Mrs. David C. Cook, Jr., Elgin, Ill.*

"Although I have not half completed the Course I find that my old enthusiasm — the enthusiasm of a young housewife — has been aroused to such a degree that my middle-age fervor far outshines that of my early married life. I would that I could infuse into the women I know the spirit I have caught from your instructors."—*Mrs. Emma Brewster Guillon, Pasadena, California.*

"I never realized that housekeeping could be made so interesting until I began these lessons. I always 'hated' it and only took up this course to please my father. Now I am ever reading and studying. The subjects are so interesting that it seems when one begins, it is impossible to stop. The lessons are not a task to me, but a never ending source of pleasure."—*Miss Clara Edna Mowery, Orange, N. J.*

FROM THE INSTRUCTORS

"I now realize the possibilities of correspondence work far more than when I began. The need of such a School as this becomes more and more apparent to me, for there are so many struggling along in their homes who cannot be helped in any other way." — *Anna Barrows, Columbia University.*

"We have been happily surprised by the character of the work which the students have done, and by the feeling so often expressed by them, that the work of the School is meeting a real need."—*Professor Isabel Bevier, University of Illinois.*

"I can truthfully say that I have never done more interesting or encouraging work and that the fine work of the School grows upon me all the time....I feel that this is to be highly commended as of a scholarly and high order which I feel it an honor to be associated in."—*Professor Bertha M. Terrill, University of Vermont.*

Aim of Home Economics

TO make housekeeping an inspiring profession, instead of deadening drudgery.

TO make the daily work in the home of fascinating interest instead of monotonous labor.

TO make housekeeping easier and simpler by utilizing modern science in the home.

TO make the household money go further, that the higher things of life may be included.

TO preserve and increase health, and thereby promote happiness and prosperity.

TO develop the children—mentally, morally and physically—to their finest possibilities.

TO effect the conservation and improvement of the American home.

TO raise ideals of American home-making.

—*American School of Home Economics,*
Chicago

Remember!

THAT ten billions of dollars are expended annually in the United States for food, clothing, and shelter—with greater knowledge and efficiency, better satisfaction could be obtained and one billion dollars saved for higher things.

THAT half a million lives are cut short and five million people are made ill by "preventable" diseases every year—with universal knowledge of hygiene and sanitation nearly all deaths and illness from such causes could be prevented.

THAT six hundred thousand infants under two years end their little span of life yearly, while millions of children fail to reach their best physical development because their mothers and fathers understand not how to care for them in the light of science—with more knowledge at least half the number of babies could be saved and the physical standard raised immeasurably.

THAT thousands of homes are wrecked, tens of thousands of lives are ruined, and hundreds of thousands are made unhappy because the home-keepers of our country have no training in the greatest of all professions, the "profession of home-making and motherhood"—only through such education can present domestic difficulties be solved and the modern home contribute all that it should to happiness and well being.

THAT all must live in some sort of a home—that everyone finds his chief happiness there—that character is developed there—that no great advance, spiritual or material, is possible which does not begin with the home—that the home-makers of America have the making of the nation.

THAT on the breadth and strength of the base depends the height of a pinnacle—on the home foundation we rear the pinnacle of all that is good in state or individual.

—*American School of Home Economics*