DOMESTIC ECONOMY.

BY MRS. WELCH.

SLANG.

Slang is one of the habits formed almost unconsciously, and a refined looking girl will sometimes shock her friends by the cool utterance of a bit of vulgarity whose coarseness she does not appreciate. Surely, our noble language, rich in synonyms and full of vigor, has resources equal to every requirement of speech. It has strength and fire enough for the passionate utterance of the strongest emotions. It has melody and sweetness sufficient to express the softest and tenderest feelings. Burning indignation, hot wrath, intense devotion, sublime feeling, dearest friendship, truest piety, can each, in turn, kindle the emotions or soften the heart in appropriate diction. It is not, therefore, because of the poverty of our language that slang has come into such extensive use. It is rather, in the first place, because of ignorance of its marvelous wealth, and, in the second place, because "evil communications corrupt good manners." A profusion of slang from a seemingly refined and otherwise pleasing young person, has somewhat the effect of ugly and decayed teeth in a beautiful mouth. While shut, we admire its symmetry. When open, its beauty is destroyed and a painful sense of incongruity spoils the whole face.

Slang is inevitably coarsening. If habitually indulged in, it blunts the sensitiveness both to essential vulgarity and to delicate propriety of speech. While not as wicked, it is certainly as useless as profanity. It is only a milder sort of billingsgate, which, from being tolerated in good society, has, with the innate vigor which all bad things seem to possess, forced itself into prominence. It is like the shoddy, would-be aristocrat whose wealth gives him a place among decent people, but who constantly offends every sense of propriety and outrages every delicate sensibility. There is no accomplishment more to be desired than the power to talk easily, gracefully, vigorously, and with propriety. With a mind properly cultivated, good taste, and a comprehensive knowledge of one's mother tongue, the open sesame to the most delightful social discourse is discovered. Pleasure to others and improvement to one's self is the sure result. This accomplishment is almost certainly placed beyond reach by the habit of slang. The very power to enjoy it in others is dulled and the hope of attaining it is destroyed by the fact that the first step towards purity of speech is the entire abandonment of slang. It destroys one's taste for refined conversation as too free use of strong drink spoils water for the drunkard. If any group of young people, talking after the common fashion of to-day, could, with unvitiated taste, hear the same conversation from others, they would surely forever after desist from the use of slang.

MUSIC IN A GIRL'S EDUCATION.

To the symmetrical completion of a young girl's education, music is a necessary adjunct. To be thoroughly educated she need not be a great musician, but she should have some knowledge of the art. A musical education does not consist merely in the ability to play the scales and five-finger exercises, or to rattle off a few pleasant melodies, or even to understand the rudiments of thorough bass or harmony. There is a vast realm of musical literature with which every young girl should be familiar. Think of the lives of Beethoven and Handel, and the beautiful lessons taught by Mozart's devotion to his art. To know something of these masters is surely as essential to a rounded culture as to be familiar with Shakspere or Milton, or to be acquainted with the immortal concepts of Michael Angelo.

It is granted that the best music cannot be fully appreciated except by those who are themselves musicians. To understand and enjoy classic music one must have a trained ear and cultivated taste, and these are to be obtained only through personal study. Even if one is unable to play herself the works of the great masters, every hour spent in practice and study, aids in appreciating the performances of others more gifted. Aside from these means of refinement that are missed by her whose musical taste has been neglected, there is the loss of many hours of pure enjoyment to herself and friends. How many homes are made bright and cheerful by the musical skill of one who can play only the simplest airs. How often father is rested, mother's cares forgotten, and the boys kept at home and away from mischief by an evening of music Contrast, too, the difficulty of entertaining a room-full of company without an instrument, and the ease with which every body is kept in good humor and made happy when a piano and a performer are at hand, and the expense of the one and the skill of the other seem well worth while.

In return for the drudgery of the first year's practice there comes the pleasure that is always derived from playing correctly even the simplest piece. The feelings brought into play when we give ourselves up to the spirit of the music, and attempt faithfully to reproduce the thought of the composer, are among the highest and purest of our nature. No mother need fear that her daughter will receive anything but good from the hours spent at the piano. The patience and perseverence which will necessarily be cultivated by earnest practice, will aid to success in other studies, and the beautiful thoughts that will invariably fill the mind of a lover of music when trying to play that which has a soul in it, cannot fail to help her to see new loveliness in nature and her surroundings.

There is that in a simple ballad well sung, or a familiar air rightly executed, which awakens thoughts and emotions that are chaste and elevating. Even the most sinful and degraded of mortals feel this power. I shall never forget a scene once witnessed in the penitentiary at Fort Madison. A party of us were visiting the place and had spent several hours looking about the work-shops and prison rooms. We were all heart-sick at the sight of so many faces stamped with the mark of wicked passions, and, more than all, the terrible despair almost always seen in the expression of a human being who is caged like a wild beast. As the last sight we were ushered into the dining room to see the prisoners all together at dinner. When they had finished the meal, the Warden requested one of the ladies to sing something for them. The bright, sunshiny beauty of her face had been shadowed all day by a tender, womanly sympathy, and now her voice trembled a little on the first strains of "Our Father, who art in Heaven." It rose clear and pure, however, at the petition, "Forgive us our trespasses," and when the last "Amen" died away, there was not a dry eye in the room. Hardened criminals, whose minds had contained for years but the vilest and wickedest thoughts, were silently crying; and one handsome-faced boy was sobbing bitterly, with his face hidden in his hands. The words of the song had, no doubt, often been listened to scoffingly, but the influence of the music and the beautiful, bird-like voice of the sweet singer, brought them home to their sin-hardened hearts with power indescribable.

I am sure from personal experience that an hour a day of practice is a help rather than a hindrance to study, and I am equally sure that there is no time in a girl's life when she is so certain to take an interest in her music as when her mind is kept bright, and all her powers on the alert, by the intellectual exercise furnished by constant study.

W. M. D.

DOMESTIC ECONOMY.

BY MRS. WELCH.

WHAT THE JUNIOR GIRLS HAVE LEARNED THIS TERM IN THE KITCHEN CONNECTED WITH THE DEPARTMENT OF DOMESTIC ECONOMY.

Every girl in the class has learned to make good bread, and has put her knowledge into successful practice, each taking her turn in mixing, kneading, and baking it, without other help from her teacher than the first lesson she received. Each has also been taught to make raised and baking-powder biscuit, pie-crust, cake of various kinds, puddings, to cook a roast, and broil a steak. All can tell which is the best cut of beef for roasting or broiling, how many minutes should be allowed for cooking a pound of roast beef, mutton, veal, or pork, how hot the oven should be for each, how to prepare it for the oven, and how to attend to it after it is put therein. They can give a clear and accurate description of the preliminary steps to be taken as a preparation for any sort of baking. They know how to stuff and roast a turkey, make oyster soup, prepare stock for other soups, steam and mash potatoes so they will melt in the mouth, and, in short, can get up a palatable meal, combining both substantial and fancy dishes, in good style.

The class have not been instructed in the arts of canning, preserving, and pickling, this year, for the reason that fruit has been, in this locality, scarce, of poor quality, and very expensive. Such general instruction has, however, been given in the principles of cookery as to discipline the judgment, and sufficient practice has been furnished to inspire self-confidence and give manual skill. It is, therefore, believed that with careful directions the members of the class can be trusted to can, preserve, and pickle, by themselves.

The indication in connection with teaching the class that gives the best promise for their future success as cooks, is the genuine interest and enthusiasm they have constantly manifested. The hard work has been cheerfully performed. Wood has been carried, fires kept up, and dishes washed, with unvarying good humor. Each week's instruction has been eagerly received, and not an unpleasant word or look has marred the good feeling from first to last. If these young girls can carry into all their domestic experiences the same sunny temper, and the unfailing industry and perseverance that they have evinced in the experimental kitchen, they will brighten and adorn any homes fortunate enough to secure them as mistresses.

Outside of the instruction in the kitchen, these Junior girls have taken careful notes of lectures on many topics connected with household management, such as house furnishing, care of beds and bedding, washing and ironing, care of the sick, care of children, etc., etc. They have prepared essays on similar topics in a thoughtful manner that has clearly proven that a genuine feeling of appreciation of the tender and solemn responsibilities devolving upon the wife and the mother, has been kindled in their minds. Their progress has been satisfactory, though they still have much to learn. We hope, sometime in the future, to add to the kitchen both a laundry and a sewing room. The authorities of this college are entirely in earnest in trying to offer to girls a broad, sensible, and practical education. They give them now the best possible instruction in science, mathematics, and English literature, and mean that some day the department of Domestic Economy shall stand right abreast of these in thoroughness and efficiency.

HOUSEHOLD AMENITIES.

So absorbed are we in getting other good things for ourselves and our children, that we often fail either to exemplify ourselves or to reproduce in them the grace and beauty of genuine courtesy. No home is half a home where roughness and surliness rule the hour. No home reaches anything like a proper proportion of its happiness and moral culture, where thoughtlessness even reigns supreme. Tom Hood never spoke wiser words than when he said,

> "For evil is wrought by want of thought,
> As well as by want of heart."

To forget to be gentle-mannered, is unpardonable indeed. We can forgive ignorance, but we cannot condone selfishness.

Almost invariably, the source of bad manners in children is to be found in the ignorance, carelessness, or selfishness of their parents. You can no more teach a child to be polite by precept alone than you can teach one to be truthful in the same way. It is often unpleasant and mortifying to see our own morals and manners reflected in our children. They are the mirrors in which we can literally "see ourselves as others see us." Do we discover faults in them, let us set to work to correct the same tendencies in ourselves. Are they untruthful, cruel, rough, loud-voiced, and disagreeable, we may be sure we have set them bad examples. Reform, like charity, must begin at home, to be effectual.

Being ourselves moved by all the sweet impulses natural to fatherhood and motherhood, and so flooding our children's lives perpetually with the sunshine of affection, from which spring sweet self-sacrifice, tender thought for comfort, a thousand pet names, loving tones, never-failing sympathy, unvarying confidence, ready help in trouble, we shall rejoice in the blossoming forth in their lives of a return of like amenities, as surely as other seed sown in good ground brings forth fruit after its kind.

If one were obliged to choose, it were better to omit the morning and evening prayer, especially if cold and formal, than the good-night and good-morning kiss. Fortunately, however, the softening influence of genuine prayer often exhibits itself in just this way, flowing from the heart to the tongue in graceful, kindly speech. A loving "good-morning" sweetens the day, as a tender "good-night" softens the pillow. A "thank you" from the heart repays richly for much labor, and a free "you are welcome" adds value to any favor. A birth-day gift, offered with heart-felt good wishes for future happiness, brings forgetfulness of approaching years, and makes each birth-day a reminder of good friends and loving hearts. "Merry Christmas" ringing gaily through the house, brings remembrance, for the time at least, of the Supreme Giver of all good gifts, and attunes the heart to better thoughts and higher aspirations. "Happy New Year" casts a ray of light adown the coming months, and girds us with fresh strength for a joyful journey on into their mysteries.

A constant remembrance of these amenities reflects good into the heart of him who remembers, too, in the same proportion in which it brightens the lives of those about him. One cannot be full of good wishes for others, and at the same time morose and sullen himself. Let us then pervade our homes with all the kindly influences of gentleness and tenderness. So shall our children grow up gentlemen and gentlewomen, reflecting our manners as they do our morals.

DOMESTIC ECONOMY.

BY MRS. WELCH.

INQUIRY FROM WASHINGTON.

The following letter to Pres. Welch and its reply will explain themselves. They are published as an evidence of the increasing and wide spread interest in this kind of instruction, and in answer to the numerous inquiries still made by citizens of our own state.

DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION,
WASHINGTON, April 5, 1879.

MY DEAR SIR:—The demands upon us seem to render it necessary for us to publish a "Circular of Information" on the subject of "Domestic Economy," at least upon "Instruction in Cooking." I shall be pleased to include, in the Circular, a definite statement from you upon the progress made in this instruction in your College, and also of any changes in your plans, in this particular. It is desirable that we have this information at as early a date as possible.

Very truly yours,

A. S. WELCH, LL. D., Pres't State Agricultural College.

JOHN EATON, Commissioner.

AGRICULTURAL COLLEGE, AMES, IOWA,
April 8, 1879.

HON. JOHN EATON,
Commissioner of Education:

DEAR SIR:—Your letter of April 5, asking information concerning our department of Domestic Economy, is received, and I reply at once.

The first instruction in this department was given in 1872, by a course of lectures to the Junior girls, on matters connected with house-keeping. In 1877, the Trustees added a course in cookery, and provided and furnished a kitchen for the use of the class. For the last two years, therefore, lessons in plain cooking have been given to the Junior class in connection with lectures on such topics as "House Furnishing," "Care of the Sick, "Management of Help," "Care of Children," "Dress," etc., etc. Domestic Chemistry forms also a part of the course in Domestic Economy.

Our facilities are still farther increased this year by the addition of a laundry wherein the girls of the Sophomore class are now learning to wash and iron. During March and April two afternoons a week are spent in this laundry under the careful supervision of competent teachers. In May the class are to receive instruction twice a week in plain sewing and are to be taught to use the Wheeler and Wilson and the Singer sewing machines. In June an experienced dress-maker is to teach the art of cutting and fitting dresses. The kitchen will be opened the middle of July and the class will receive instruction in cookery two afternoons weekly until the last of October. We are to use, this year, Miss Juliet Corson's "Cooking School Text Book," giving the class the "Plain Cooks' Course." Each student will be required to do the work explained in every lesson so that, when the course is finished, she will have cooked every article described.

A constant and increasing interest and enthusiasm have marked our progress in this department of study and no one of our college courses has attracted more, attention or received more encouragement from the state at large.

Yours very truly,

MARY B. WELCH.

Lecturer on Domestic Economy and Sup't Exp. Kitchen.

COOK BOOKS.

Since cooking has come to rank so high among the arts, and since mothers and daughters are as elated over a culinary triumph as over an elaborate piece of embroidery successfully accomplished, many new cook books have been written and published. Most of them are simply a collection of recipes given in a decidedly loose way, advising each experimenter to "season to taste," or to "add a pinch of salt, a small quantity of pepper and sufficient mustard to give zest," etc., etc. One is puzzled and worried at being told to "add flour to make a stiff batter," or "to put in butter, the size of an egg," or to "use your own judgment about seasoning." There are so many degrees of stiffness, and eggs so provokingly differ in size, and one has such an instinctive distrust of one's "own judgment about seasoning" that the compounding of any article of food after such a recipe becomes a series of bewildering problems that in nine cases out of ten are not satisfactorily solved. A recipe, to be good for any thing, should be as definite as a mathematical statement and as sure as an axiom. The same quantities of material, of like quality, put together in the same proportions, should and will always produce the same results. Guessing is of no more value in cooking than in science, though a vast amount of it has been done in each, to the sore bewilderment of both cooks and students.

Cook books are used chiefly by beginners, and therefore great care should be taken to make every process clear, simple, and definite. When long years of practice have cultivated the taste, rendered the hand cunning and the judgment reliable, then the experienced cook may indeed trust to her own skill, aud be able to tell when the batter is stiff enough, and the lump of butter of the right size. In the experimental kitchen of the Agricultural College every recipe has to be brought to this test—"Is it definite enough so that a novice in the art can follow it succesfully?" When the text book used in the South Kensington Training School for Cooking was published, we sent for it, full of hope that at last the right book had been found. Its method is certainly admirable, as each recipe is divid-

ed into successive steps, wherein every process is set forth and the precise amount needed of each article stated, together with the price of the ingredients, the temperature of the oven and the time for cooking. It contains also an article on the "Principles of Diet in Health and Disease," by Dr. Thomas K. Chambers, which alone is worth the price of the book. Many of the recipes are exceedingly valuable, and we can heartily recommend the entire work as a useful addition to any housekeeper's resources in this line. These lessons in cooking can indeed be successfully practiced in or near a city, where access to a good market is easy, where herbs, materials for sauces and seasoning, a variety of fish, flesh and fowl, numerous vegetables, etc., etc., are each to be found in its season. We were, however, greatly disappointed to find that, while admirably suited to such localities, it did not meet our western needs. In order to use this book successfully, one must unlearn the common names for roast, steak and boiling piece, and substitute other nomenclature in their place. There is just enough difference in these terms to puzzle and worry a learner. Then the utensils have strange, unfamiliar titles, and even the names of the dishes we are taught to cook are new to us, and somehow we lose heart in trying to teach our girls to cook food they never heard of, and have not the least desire to try. They say: "We can't get the materials for these things at home, and are sure we cannot persuade our people to eat them, if we could. Please teach us something that plain people in plain homes will like to eat." We were obliged to relinquish this text-book of cookery.

Then we sent for the Des Moines cook book, "'76," the Chicago "Home Cook Book," Mrs. Henderson's "Dinner Giving," Mrs. Henry Ward Beecher's "All Around the House," and others too numerous to mention, but none were exactly to our mind. The Des Moines and Chicago books were by far the best, and we found many good things in them for our pupils. Still they had not been written for, and were not wholly suited to, class work. Finally we wrote to Miss Juliet Corson, Superintendent of the New York Cooking School, for her text-book, and were rejoiced to find it so much nearer our ideal that we have decided to adopt it for this year's class. We have been carefully studying it for three months, and are so delighted with it that we desire to describe its merits to the readers of THE QUARTERLY.

The book opens, as is most appropriate, with careful directions concerning needed utensils, the necessity of accuracy in weighing and measuring, the usefulness of herbs, with a list of the most important, and instruction how to grow, gather and preserve them, the care of the kitchen, the stove and all cooking utensils, the best kinds of fuel, with degrees of heat given by each, the necessary temperature for cooking various articles of food, etc., etc. Then follow the different courses of lessons, namely: "First Artisan Course," "Second Artisan Course," "Plain Cooks' Course," and the "Ladies' Course." The closing chapters discuss such important topics as the "Physiology of Nutrition" and the "Chemistry of Food." Both of these subjects are treated in a clear, concise and comprehensive manner, and are so put that any person of ordinary intelligence can profit by the information given.

We propose taking the "Plain Cooks' Course" as the basis of instruction for our class in Cookery this fall. We shall also select such other recipes from all the courses as seem most valuable to us. A thorough mastery of the last chapters will be required from each student in the class.

A few of the same objections that prevented the use of the South Kensington "Lessons in Cookery," meet us in trying to follow exactly any one course in Miss Corson's lessons. We are too far from a good market to be able to get all the materials required for the full course. Many of these are perishable and cannot, without great expense, be conveyed long distances, but such recipes as we can use are so plainly and accurately given, and are prepared with such careful attention to economy and health, that we are quite certain of their value to any household. Miss Corson is doing much to elevate the subject of cookery to a systematic and well-classified science. She brings to her work all the resources of a quick and thoroughly cultivated intellect, the enthusiasm of a genuine philanthropist, and the skill of a successful cook. She has done more for New York City, for both rich and poor, by her careful study into the relations between food and economy, by her excellent recipes for 15 and 25-cent dinners, by her instruction in cooking, marketing, etc., to the children of the poor, and by her general management of the New York Cooking School, than can easily be estimated. We are making great progress as a nation when we are learning to obey the laws of health and economy in the food we eat. Even good brain work is largely dependent on a well nourished body, and the muscle that builds our railways, drives the plow and directs the engine, will surely fail us if not sustained by properly selected and carefully prepared food.

"Politeness does not consist in any outside mannerisms, nor is it simply kindness. It consists, as one wiser than I has said, in treating every person as if she were what she might be, instead of what she actually is."

DOMESTIC ECONOMY.

BY MRS. WELCH.

"HONOR TO WHOM HONOR IS DUE."

The element in any pursuit that commands respect is the draught it makes upon the intellectual resources of those who follow it. Why are the so-called learned professions regarded as more honorable than the handicrafts? Certainly not on the ground of utility, but on the supposition that more study is needed to prepare for them, and constant mental labor is thought to be necessary to success in following them. The average lawyer must think more than the average carpenter, but as soon as the latter, by force of superior thinking, is enabled to become great in his line, he rises infinitely above the former. When, while handling his tools, his brain works actively, and from a mere manipulator he develops into an inventor, a designer, an improver of methods, or a teacher of advanced processes, he elevates his craft and compels respect for himself. Exactly in proportion to the amount of hard study and close thought applied either to medicine, commerce, or trade, does a man rise.

It is most puzzling that this rule, universally applied to man's work, should be almost wholly ignored in judging woman's work. Surely it is not asking too much to beg that what we do should be measured according to this standard. If mental power applied to work gives valuable results when a man is the worker, who shall say that it ceases to be effective when a woman takes his place? If in a comparison between the labor of the sexes—the one in the world and the other in the home—it be found that the skillful housewife must put as much mind into her work as the skillful mechanic, shall not she rank as high among the workers of the world as he? If this one plea be granted to woman, she may well afford to drop every other question of civil or political rights, for this includes all the rest.

When the scoffer at woman's rights says, with a lofty satisfaction in his own superiority, "Woman's sphere is home," he proves conclusively his intense ignorance of that sphere. His arrogance and conceit blind him to the fact that home so includes all other spheres, that each man is enabled to move in his own small circle creditably only in proportion as this sphere is properly adjusted and managed. To prove this assertion, I have only to call to mind the utterly helpless condition of the newly-made widower, with a housefull of children on his hands and no woman to help him out of his dilemma. He cannot even dress himself comfortably, to say nothing of his poor babies. He is utterly incapable of feeding either himself or them, and without food no man can work. How quickly would courts, stores, depots, post offices, etc., etc., be closed, if all the home machinery should suddenly give out. No! Man can only do his peculiar work so long as woman makes it possible for him.

What are the demands made upon woman as wife, housekeeper, and mother? Could the same ability required to do her work well, if applied to a trade or a profession, ensure success? Granted that the husband furnishes the means for the comfortable maintenance of his family; in order that it shall accomplish what he desires, she must equal him in industry, skill, and economy. With the money he provides she surrounds him with comforts. She supplements this income with the work of her hands, and the patient exercise of all womanly contrivances to double its value shows that her brain is as busy as her fingers. She bears his children, brings them up to respect themselves and their parents, nurses both the father and them when they are sick, prepares the food that strengthens her husband's arm for work, nourishes the growing little ones and supplies the material necessary for the proper development of muscle, bone, brain, blood, nerves, etc. She is in great measure the keeper of her children's consciences and responsible for their moral well-being. From her they receive their first impulse towards virtue, truth, honor. They bring all things in their experience to this standard, "Mother does, or does not, think so." Her gospel is accepted with the unquestioning faith that children only can exercise. Sad is it for her and them should maturer years prove it false.

This is a long list of duties, each of which is complicated and varied enough for a distinct business. Cooking, cleaning, washing, ironing, sewing, nursing, and teaching, and all to be carried on simultaneously and no one neglected to the detriment of the others. What farmer could plow one field and sow another at the same time? What merchant keeps his own books, is his own clerk, and does both the buying and the selling? What man is carpenter, mason, and plumber? If a minister has ordinary business ability and attends to his own money matters, he is thought to be neglecting his duties and is advised to study more and calculate dollars and cents less. Do we not hear of office lawyers, pleaders at the bar, criminal lawyers, divorce lawyers, etc., etc.? Can it be the mind of man is not large enough to grasp so wide a variety of pursuits as a woman's? In the humblest home in a civilized land, the woman who has the care of a family is expected to do a wonderful number of distinct things at least respectably, and is thought to fall far short of her duty if she fails signally in any one. As wealth and social position enlarge, her burthen is not lessened but increased. She must now govern and direct where before she was herself the worker. Her "sphere" widens

out until it embraces the universe,—kitchen, parlor, library, dinner-giving, entertaining, visiting, reading, religious duties, benevolent associations, entertainments of various kinds and for various purposes, helping her husband's influence politically, socially, or otherwise. Who does not know women who attend to all these things, and do it marvelously well, too ?

Trying her special work by the test of intellectual power, should it not then rank high ? If the honor due it should be accorded and mankind would acknowledge, what surely is true, that the wife and mother who stands at the head of a large establishment and manages it well, holds a place *in and of herself* equal to that of the successful business man, would not more ambitious and restless women strive to do in the best manner what now they chafe against doing at all ? It *is* hard to give one's life to that which, according to general opinion, is an inferior pursuit. It *is* aggravating in the extreme to know that you are doing well what the average man of your acquaintance has not the capacity even to appreciate, and then submit with a smile to be called an inferior being or a "superfluous" woman. It is no wonder that many high-spirited and capable women rebel and enter the professions which are acknowledged to require mental force. And is it not sometimes true that she proves herself there "the better man of the two?"

What would the effect of proper appreciation be upon the worker in the home ? It would elevate the standard of excellence so that no pains would be spared to make the housewife perfect in her art. Cookery would become a science; every mother would be held responsible for the mental and moral condition of her children; extravagance, waste, loose business habits in the management of the home, would become more rare; and the higher the credit given to woman's work, the more would she strive to be worthy of it. It would settle the question of wages in great measure, too. The maid-servant in the kitchen, if her work were rated at its true value, and she had therefore prepared herself fully for it, would certainly receive as large remuneration as the laborer on the farm; the nurse-maid would be paid for her care of the children of the family at least as well as the coachman for his care of the horses; the housekeeper who lifted the load of responsibility from the shoulders of the lady of rank and wealth, would stand on a level with the business manager of a large manufactory, and the guardian of the domestic arrangements of a great hotel with the superintendent of a railway. In short, the constant war of words as to the equality of the sexes would come to an end, and man would gracefully acknowledge, with refreshing and manly frankness, his debt to her who renders it possible that he shall work at all, and supplements all his labors with the wit and wisdom peculiar to her sex.

TEA.

[From Miss Corson's Cooking-School Text-Book.]

The physiological action of this pleasant beverage is so well known that any studied discussion of it would seem superfluous. We shall, therefore, only recall some of the chief facts connected with it. We all know that it causes cheerfulness, clearness of mind, wakefulness, and nervousness, while it increases the action of the skin and lungs and lowers the heart's pulsations. It is certainly a welcome accessory to every well-spread board. In fact, it is one of those luxuries which custom clothes in the garments of necessity.

There is, however, in connection with tea, one point which should not be forgotten. We have already said that the body requires immediate nourishment early in the morning; and for that reason tea, which retards the action of the natural functions, should be banished from the breakfast table, and should appear at lunch and after dinner. Certain rules should be followed by habitual tea drinkers, if they wish to use their favorite beverage without injurious effects. They should use a moderate quantity of tea. Always make the infusion with boiling water, and employ milk as an adjunct, and sugar, if liked. Especially should they remember that the high-priced teas are less desirable for general use than the medium qualities, both on account of their price, and because, owing to their purity and strength, they abound in deleterious properties. A judicious mixture of several kinds of tea is often desirable. An excellent English mixture, which combines cheapness with fineness of flavor, is composed of one pound of Congo tea with a quarter of a pound each of Assam and Orange Pekoe. The usual mixture of black and green tea is four parts of black to one of green.

CELLARS.

While a cellar is, no doubt, a great convenience, it is, likewise, a source of disease and danger. During the warm weather it is of vital importance that the good housewife should give daily attention to this portion of her domain. Let no decaying vegetables, foul-smelling soap-grease, unclean jars, or moldy food taint the air which is constantly passing into the living-rooms above. Housekeepers should regard any untidiness that imperils health as a sin. Why is it any more wicked to deliberately mix poison with food, than as deliberately to poison the air upon which the health of the family as absolutely depends as upon wholesome food ? Indolence is hardly excusable when it risks human lives and human happiness. Ignorance can scarcely be pleaded as an excuse. So much has been written on this subject of late, that every woman of ordinary intelligence must know that bad air is poisonous. I hope the time will come when housekeepers will be called to a strict account for the appearance of diseases in their households that are evidently caused by dirt and neglect.

DOMESTIC ECONOMY.

BY MRS. WELCH.

A PLEA FOR THE "HIGHER EDUCATION" OF COOKS.

What are some of the things that every cook who prepares the food for any family ought to know? Unless the whole routine of her work be hap-hazard and unreliable, she should have intelligent and well-defined opinions concerning the relations of food to physical growth, so she can furnish that which is best adapted to the whole household, fit to build up symmetrical and healthful bodies for the children, as well as to give to the mature workers in the family the necessary nutriment to keep good the balance between supply and demand. The children should not fail to develop properly because of her ignorance of their needs. The father should never give out more strength and vitality in his struggle with the world than she can make good to him as she prepares his daily food. All this implies a practical application of the principles taught in physiology and chemistry, as well as a knowledge of the kind and quality of nourishment stored in plants, flesh, fish, and fowl. Earth, air, and sea, furnish her with materials which she must understand how to prepare so that it can be easily transformed into bone, blood, and muscle in such porportions that each shall have its proper development. She must be both too wise and too humane to concoct any dish or brew any drink that will induce dyspepsia, headache, or dullness. Never until cooks give more time to the mastery of such studies will cookery take its proper place among sciences. These bodies of ours are exceedingly complicated and delicate machines, not to be safely tampered with by bunglers. A blacksmith can undertake with greater impunity to make a watch, than an ignorant and untrained housewife to build up without knowledge and without skill a symmetrical and perfectly developed human body.

And when the value of these bodies, not only as physical organisms but as related to mental growth, is fully appreciated, the work of the skilled cook will rank with that of other great scientists, and, more than this, with that of other great philanthropists. It is not extravagant to say that the progress of humanity towards true perfection depends largely on this branch of domestic economy. How much thought, time, and study are given now to the proper food for fine stock. Here in our own laboratory extensive analyses of grasses, grains, etc., have been made in order to determine which will most rapidly and healthfully stimulate the growth of cattle and swine. Surely we owe as much care to our children as to our herds. It is certainly true that just in proportion to the advance of any people in civilization will be the advance of care and skill in the preparation of food. It is therefore worthy of absorbing study. Health, mental vigor, virtue, and happiness depend more closely than we are apt to imagine on the cook who reigns in our kitchen.

HOME STUDY.

Every earnest young woman who sees the last term of her college course drawing to its close, is conscious of a more or less definite purpose to continue some branch or branches of her studies after graduation. Fruitless, indeed, have her college years been if they have failed to stir up in her mind some resolution, however vague and undefined, to go a little farther on into the limitless realms whose gates have been opened to her. Even the slow and dull student, who seems never to relish or rightly appreciate her studies, has often her own cherished plans for pursuing some favorite branch after her college days are over. Unfortunatly these half-formed purposes expire, in a majority of cases, before they have produced any fruits whatever. But why is this the case? And how can it be remedied? Those young women who have selected their future pursuit or profession before leaving college, enter at once upon some special preparation for it and thus there is no suspension of growth, no mental relapse in their case. But to those who have no definite purpose in life, and to those whose duties, domestic or social, do not afford them the mental stimulus to which they have been accustomed during their school life, the first year succeeding the sudden closing of text-books is likely to be an uneasy and unsatisfactory one in some respects. It is not a year of idleness, but of irregular and unsystematic work, perhaps of uncongenial work. The lack of method is the secret of its being unsatisfactory, and generally also of its being uncongenial. The busiest life that is likely to fall to the lot of any young girl after leaving school, can be so regulated by introducing proper system into its routine as to leave a sufficient margin for daily and fruitful study. It is the will, the firm purpose, rather than the time which is lacking; and here, as in so many of the cases, the wish is often mistaken for the will. Let it be understood, however, that no time or opportunity will ever be found for study at home, unless it be placed on a footing of equal importance with the regular work. What is left to be done after everything else is done which can be found or invented to do, will never be done at all; and so it usually happens that the time for home study never comes, and the days go by and leave behind them an uncomfortable sense of purposes unfulfilled. One hour of the twenty-four set apart for study may, in the course of a year, produce astonishing results; but it must have, in the programme of the

day's duties, its own established place which nothing must be allowed to encroach upon.

Another frequent cause of disappointment and failure lies in the fact that too much has been attempted. It is not usually possible to pursue more than one subject at once with any degree of success. The unavoidable distractions, and the necessary duties of common life do not leave time nor interest for more. It is wise therefore to settle upon one out of the many subjects that seem to have equal claim and perhaps equal charm, and adhere to this choice faithfully for at least one year. It is such regular and concentrated effort that never fails to produce valuable and most satisfactory results. M. SINCLAIR.

ECONOMY.

To be economical is to be patient, thoughtful, wise, fore-handed, self-denying, prudent, independent—indeed it is to be the living incarnation of all virtues. I know that Micawber said the solemn truth when he tragically stated his financial problem,—"Annual income, twenty pounds; annual expenditure, twenty pounds, no shillings and sixpence; result, misery." I know that I *must* meet all the wants of a family of growing girls and boys on moderate means, keep up with the times as far as possible, and above all keep free from debt. And still more, if the increasing expense of education is to be met, something must be put by every year as a sort of sinking fund to meet the future emergencies. Where shall we begin to economize more strictly than heretofore? Husband suggests that I weigh out all the supplies for the week and then set my wits to work to make myself come within the prescribed quantity. I say "good," and proceed to weigh. It works excellently well as far as it goes. I find myself constantly calculating whether the sugar in the drawer will admit of fresh cake for tea or an extra pudding for dinner. Whether the butter and molasses will warrant hot cakes for breakfast, if I can ask neighbor Blank to tea, or send poor widow Smith the usual weekly basket of goodies. When the plan was first put in practice we were apt to live quite freely Monday, Tuesday, and Wednesday; a little more moderately Thursday and Friday; and *very* plainly Saturday and Sunday. But experience and care have helped us to better calculations and enabled us to divide the supplies more evenly through the week. We have even saved a little some weeks so as to be able to indulge in company occasionally, and no one complains now of the daily fare.

Still the two ends do not overlap as they should, and wife suggests this time that accounts shall be kept. Husband thinks this would be an excellent thing for the partner of his joys and sorrows, but don't see how he can spare the time to put down every cent that he spends. Wife insinuates that he prefers not to give an account of all he spends, and that he does not realize how many dimes go weekly for that which is not absolutely necessary. Both finally agree to set down carefully all expenditures and compare notes weekly, and both are surprised at the end of the first week to see how open to criticism the note books are. Each sees very clearly how much less the other might have spent with due care and thoughtfulness. So the next week both look regretfully at every penny that is paid out and make great improvement in the sum total. We are delighted now, month by month, to know that the margin between outlay and income is increasing, and that we are not only adding to our reserve fund, but can tell precisely where our money has gone, what it has paid for, and where we can improve the situation another year.

And so we learn to economize, and what appears difficult at first becomes a habit and seems natural and easy. Economy is not meanness. It is not stinginess, for that often defeats itself and costs more in the end than judicious expenditure. It consists chiefly in a correct judgment as to the values of things, and in a full appreciation of the wisdom of Micawber's statement.

PHYSIOLOGY AND HYGIENE.

Attention is called to the following letter taken from the *Chicago Inter-Ocean*. It discusses a matter in which not only School Boards but every parent is deeply interested. Education will progress in the right direction when children are taught to respect the laws of health:

AN OPEN LETTER TO MEMBERS OF SCHOOL BOARDS.

There is probably no truth more patent to the thinking mind than that a large proportion of the disease and mortality in the human family is preventable; and that the chief means to this end is a wide-spread knowledge of the laws of physiology and hygiene, and the application of these laws to individual life. How to spread this knowledge among the masses, is a question worthy the consideration of the philanthropists.

To our public schools, more than to any other great agency, must we look for the dissemination of this knowledge, and to this end we would request the various school boards of our state to give a more important place to these branches of study than they hitherto have occupied in the courses of study; and since statistics prove that two-thirds of all attendants pass in and out of our public schools before reaching the third grade, we would ask that the branches above named be given an important place in the lower grades, and that they be presented by a method of oral teaching and object lessons easily comprehended by the young, reserving for the higher grades the more technical method represented by text-books. Believing that such a revision of the present curriculum of study is needed as will place paramount to all others those branches which relate intimately to human existence and to the laws governing it, and that such a course of study would create an influence which would operate as a powerful check in the near future upon those evils which are now rampant, we are prompted to make this request.

S. F. BAKER, M. D.,
JULIET CALDWELL, M. D.,
JULIA HOLMES SMITH, M. D.,
Committee of Sanitary Science for the Illinois Social Science Association.

DOMESTIC ECONOMY.

BY MRS. WELCH.

NOTES FROM THE DEPARTMENT OF DOMESTIC ECONOMY.

The class in cooking for this term numbers ten. It should include properly only the junior girls, of whom there are but five. The pressure upon the President for admission to the class has been so strong however that he consented to the irregular enrollment of five others, who greatly desired to receive the instruction this year. The present quarters are so small that the class was necessarily separated into two divisions, one working on Wednesday and the other on Thursday afternoon.

In the six lessons which will have been given them before the issue of this QUARTERLY they have been carefully taught the following things. The preliminary lesson was on yeast, stock for soup, and eggs. The first hour was given to an informal talk upon each, from which ample notes were taken. Recipes were also furnished and copied. The remaining two hours were devoted to practice. Stock was put over the fire to remain the required time, and one young lady detailed to skim and care for it. Yeast was started, and eggs cooked in a variety of forms. In successive lessons came bread-making, tomato-soup, clear-soup, and *Julienne* soup, the broiling of steak, roast beef, boiled potatoes, *duchesse* potatoes, salads, and general directions and practical illustration as to the proper garnishing of these several dishes. The boning, stuffing, trussing and baking a shoulder of lamb with the preparation of the several vegetables for the appropriate garnish occupied one afternoon. A lesson on poultry, illustrated by cleaning and dissecting one chicken, making a chicken curry, and by stuffing and trussing another to bake followed, and the sixth lesson was devoted entirely to cake making.

For every lesson the same general method of teaching has been pursued, namely, about an hour's verbal instruction from which notes are taken by the class, and two hours practice. The teacher goes carefully through the entire process described in any receipt, the pupils gathering around and assisting when asked. As opportunity occurs, some one is called on to work out a receipt by herself, and as far as possible each student will be expected to cook everything that is given in the course. There is a wholesome interest manifested in the work, and successful results arouse the same enthusiasm that high standing in other classes calls forth.

EXTRACT FROM FIRST LECTURE ON DOMESTIC ECONOMY TO THE PRESENT CLASS.

When the judicious and successful management of household matters is rightly valued, the thoroughly prepared and efficient wife, mother, and house-keeper, will rank among the master-workers of the world. We must help to form public opinion on this point, both by the high estimate we have of the worth of every womanly duty and the constant effort we make to reach perfection in the discharge of such duties. Every aspiration of the most ambitious woman could be satisfied in the building and development of a home if only she and the world rated her work at its true value.

And now a word as to woman's natural rights as a worker. While I regard that woman supremely blessed, who finds work for her hands to do inside the shelter of a genuine home, I wish it to be distinctly understood that I do not think her thus blessed because there she may have opportunity to avoid responsibility, or because she is so naturally dependent, she is not fit for other work. On the contrary the essence of her good fortune is that work more valuable in its results to the world than any other work can be is hers in the fullest measure. Work, too, which is sweetened by sympathy, hallowed by love, made sacred by the overwhelming possibilities it involves, and rewarded, if faithfully performed, by fruits which shall be perpetuated through the cycles of eternity. Instead, too of being naturally dependent, she is in the home more than elsewhere on the round earth, thoroughly independent. Husband and children look to her in absolute helplessness, not only for bodily comforts, but for all comforts. What more forlorn and utterly useless creature can you imagine than the husband whose well-managed home is suddenly deprived of the busy brain and untiring energy that kept every wheel of the domestic machinery smoothly in motion. He is here the natural dependent—she the supreme sovereign.

It is needless to say that there are many unselfish and dignified women doing noble work for humanity, outside the shelter and seclusion of home. It is quite too late to think that the capabilites of any human being are limited to any special or peculiar sphere. Woman's work, like man's is limited only by the talent God gives her, and if through force of fate—she be denied a home, and devote her life to the fulfillment of any lofty purpose she is still accomplishing her destiny and helping the world on—I believe to the widest extent, in the limitless possibilities of every human life. Do *all* your work well, and if the kind hand of our heavenly Father shall lead you into the safe enclosure of a happy home, so live, that from it shall radiate every good influence—so fill the sacred sphere that it shall include within its charmed circle a power far-reaching enough to satisfy every craving of your intellect, every desire of your heart, every aspiration of your ambition. Thus from your vantage ground you shall move the world. But live like-wise to exert equal power and like influence in any sphere. Be women inspired by purposes lofty enough to command respect by force of innate character anywhere and everywhere.

DOMESTIC ECONOMY.

BY MRS. WELCH.

T——, Iowa, Tuesday, June 1, 1880.

DEAR MADAM:—I write to enquire, if in your opinion, instruction in Domestic Economy is a legitimate part of a college course? Should not young girls rather be taught to cook, sew, etc., by their mothers, in their own homes? I have heard this so often suggested, that I would be greatly obliged to you for your reasons for considering it a proper thing to teach in a state institution. Please answer in the QUARTERLY.

Yours respectfully, J. G. H.

AGRICULTURAL COLLEGE, Ames, Iowa,
June 14, 1880.

DEAR MISS H:—Your letter was received in due time, and I thank you for the opportunity thus given to express my views on this important question. Undoubtedly home *is* a good place for girls to study the domestic arts, and mothers may be excellent teachers thereof, but after the manner of the traditional yankee, I will reply partially to your question by asking another. Do girls as a rule study these arts at home, and do mothers in general give much time to their instruction? Taking your average acquaintance, how large a proportion of the girls of seventeen whom you know are accomplished cooks or seamstresses? And of those who *can* get a respectable meal, how many can tell the difference between a sirloin and rib-roast, a porter-house and round-steak, or give the reason why meat should be plunged into boiling water, if for table use, or into cold water when soup is the desired result; or explain how to select healthy and tender meat in the market, or to avoid buying that which bears the marks of disease or old age? How many know the antidotes for the various poisons, are acquainted with the use of herbs and the wonderful variety of condiments, etc., for seasoning? Even though home be a good place for such instruction, and mothers good teachers, if the facts prove that the lessons are not given and the girls do not learn, shall they therefore be debarred from the important knowledge they need so supremely?

And now for some of the reasons why the average mother in the average home does not give much time to the systematic instruction of her daughters in these important matters. Two things combine in most homes to prevent such teaching. The mother is so busy and so hurried she really has little time to spare for this purpose. The meals must be ready promptly and the result of the work necessary to their preparation must be reasonably sure every time. She cannot stop to have the daughter experiment. She cannot stop to answer her questions or go into long explanations. The absolute fact that father will be home at 12 o'clock and his dinner must be ready, outweighs for the time the other equally absolute but more remote fact, that the child is growing into womanhood unprepared for the duties that probably await her. If the mother is doing her own work, the daughter will doubtless learn to take steps for her, to wash dishes and even to do something in the line of cooking. Sometimes indeed, but all too rarely, there does exist between mother and daughter so close a fellowship, so tender an intimacy, each living so near the other that they exchange lessons with wonderful quickness, the one keeping fast hold of the sweet and sunny things belonging to youth, and the other entering joyfully into the tender mysteries of the elder experience. It is indeed most beautiful for a child to be thus gently taught what the harsh years impress sternly upon many less fortunate and it is equally lovely to see a mother as young and happy as her daughter, while both meet life aided by the other's influence. But this, alas, is not the usual experience. Where help is employed and the kitchen, work left largely to be done by this help, it cannot be expected that she shall add the labor of teaching, to her other duties. Neither can it be hoped that the young daughter of the house will put herself under the instruction of one she regards, however unjustly, as her inferior—unfortunately too it is often true that the mother herself is justified in her objections to place her daughter too much under the influence of the girl who is hired to do the work. Add to these facts the unreasoning tenderness of the average mother, who resolves that her child shall be spared the hardships she herself has suffered or must endure, that life shall be, as far as she can make it so, all brightness and sunshine for her little girl, that she will work that her daughter may play, and you have an array of almost insurmountable obstacles to prevent the mother from initiating the daughter into the mysteries of house-keeping.

And there are some barriers to be overcome also, when we look at the other side of the picture—some reason on the girl's part why it seems so difficult to find place in her education for this vitally important study. Most American children are sent to school at or before eight years of age. From this time the heart of the day is spent indoors with book and pencil. The nooning rarely suffices for the Mid-day meal. The child comes home after school at night, tired and needing play. It really is not right to require more work of a weary little girl who has been confined to the house already for six hours. As she grows older if she adds music, or any of the accomplishments to her regular school work, there is indeed no place or strength or time for anything else.

It is agreed by all that she should be taught all household duties before she becomes herself responsible for their proper fulfilment. How can it *surely* be done. *Theoretically* it is most proper that the mother should do it. Practically she does not. We need to place this part of her education beyond peradventure

a we do arithmetic and grammar. How many scholars would the year 1880 produce, if the schools were closed and the mothers left to teach the rising generation? A few, I grant you, for mother-love is capable of performing miracles in some rare cases, but the rank and file of the juvenile army would come to maturity "unlettered and untaught," I fear, if the work of education were given over to the mothers. We realize the value of reading, writing, and arithmetic, and spare no pains to ensure them to our children. We must rank sewing, cooking, etc., along with these if we would equip our daughters for their work in the world. The influence on a young girl's mind of finding them embodied in a dignified course of study, co-equal with other sciences and necessary to her graduation is not to be over-looked. What she will consider menial and burdensome in her mother's kitchen, she will grow enthusiastic over when elevated to the level of botany and physics. She will not study any of these three at home as a general rule, but when under the spur of competition in the school, and the pressure of public opinion outside, she will do her very best to excel in all. Our friends are constantly urging us to teach practical agriculture to our boys. Is it not slightly inconsistent to criticise our earnest and successful attempt to teach practical house-keeping to our girls? Should not the farmer father instruct his sons in the theories and processes of crop-raising, and the *sciences allied thereto?* How much time has he while earning the daily bread for self and family to unfold the wonderful history of soil and sky, and explain with minute care the circle of chemical changes in which both vegetable and animal take never-ending part? Can he tell the story of each harmful insect, explain the horticultural methods by which his prairie farm may be made to bloom and bear fruit in generous profusion? Is he able to develop the subtle processes by means of which the domestic animals may be made to round out their proportions to their fullest limit? Yet we require the mother to do just as much. We do not realize how great the task is, until we attempt to teach the household arts and sciences systematically and thoroughly. And as to the necessity and call for such instruction, let me give a page of my experience during four years work as teacher of Domestic Economy. In that time a few girls, it is true, have been excused from the classes in laundry work and sewing upon passing a creditable examination in both, but not *one* has asked even to be examined in cookery, and all are eager for the lessons. I have had whole classes of young ladies, averaging seventeen years of age, *not one of whom* had ever seen a steak broiled—and remember that our girls come as a rule from the working classes, and have lived all their lives in homes where no help was kept. We exult in this fact too, and assure you that they will compare most favorably with any school girls have ever known in twenty years labor as a teacher.

And now for my last proposition. Ask any man—and you know men are always delighted to settle any question as to women's rights or duties,—which he regards as the most important knowledge for the girl he hopes to marry, botany or bread-making, physics or fritters, geometry or graham gems, and see what he will reply. We consider *all* immensely valuable, and see also what most men fail to see, that they actually depend on and are necessary to each other. So we say emphatically give each a place in every college curriculum that pretends to graduate a girl, and future generations will surely rejoice in the result.

Yours very sincerely,

M. B. W.

SALADS.

Lettuce properly prepared makes a most delicious salad. In the first place, it should never come to the table wet, but, after being washed, should be carefully dried on a napkin or a clean towel. In the second place, it should never be cut, but pulled apart or shredded very carefully with the fingers. Cutting makes it tough and gives it a wilted and dilapidated look, anything but inviting. The genuine French salad dressing is made as follows: two table-spoonfuls of oil, one of vinegar, a salt-spoonful of salt and a quarter as much pepper; when well mixed, pour over the lettuce and turn the crisp and tender leaves over once or twice, and you have an addition to your dinner which an epicure will envy. The less you handle lettuce the better. To be perfect it must be washed quickly, dried gently and thoroughly, prepared speedily and eaten immediately. A most excellent salad can be made from a few cold, boiled potatoes, a raw onion, and the same French salad mixture used for the lettuce. Cut the potato in thin, even slices, and treat the onion in the same way; arrange both in alternate slices on a small platter, and with a tea-spoon pour the salad mixture over, so that some of it will reach every slice of potato and onion. This should be prepared an hour or so before dinner, so that the salad will be thoroughly well flavored. If the raw onion is to strong too be enjoyed the potato can be eaten alone. It will be just sufficiently flavored with the onion to be extremely appetizing. When tastefully arranged it is a very pretty as well as a very palatable dish. If lettuce can be obtained, the slices of potato and onion can be arranged on a leaf or two of lettuce, or a few sprigs of parsley can be added as a decoration. Celery also makes a good salad, cut in medium-sized pieces and dressed with the French mixture. Lemon juice is a good substitute for vinegar in the above dressing. Too much ac'd spoils a salad. If oil is not liked, a smaller proportion of thick, and perfectly sweet cream with a pinch of mustard makes a fair substitute.