

## PURE FOOD SCARCE.

NINETY PER CENT OF THE SUPPLY IS ADULTERATED.

Startling Revelations Brought Out by the Senate Investigating Committee—Enormous Amount of Fraudulent and Poisonous Products Produced.

If there is any pure food manufactured or sold in this country, the Senate Pure Food Investigating Committee, which took testimony in Chicago, did not come across it. The evidence in the hands of that committee tends to show that nearly all the commoner articles of food are adulterated by the manufacturers, and some of them with deleterious and dangerous substances. One of the witnesses, Dr. H. H. Wiley, chief chemist in the Department of Agriculture, went so far as to tell the committee that 90 per cent. of the liquid and solid foods consumed by the people of the United States are adulterated. And Dr. Wiley said this statement was based on his personal investigation. He had, so he told the committee, examined and tested almost every article of food and drink bought

ernment officials, is chiefly the result, but wholesale loss of life has occurred. In a report made by A. J. Wedderburn, a special agent of the Agricultural Department, he calls attention to many cases of death. The deleterious substances are usually used through ignorance, one case of record being that of which death resulted from the use of chrome yellow, not only to the customer, but also to the vender and the members of his family.

Coffee is perhaps the most extensively adulterated article. Consumers do not take the trouble to find out whether their coffee is genuine or not. Artificial coffee beans used to be manufactured with consummate care, but nowadays many producers do not attempt to imitate the beans except in color and size. Spurious coffee beans were formerly imported from Germany in large quantities and to some extent from France. But American manufacturers, realizing the profit to be made in the trade, entered the field and now make better imitations than any that are to be imported. Flour or almost any cereal is mixed with molasses and molded to resemble the bean and then roasted and colored. Sometimes chicory or burned sugar forms a part of the compound, which, although almost worthless, is not harmful when com-

leaves. Coloring is common and is called "facing." It generally consists in coating the leaves with powdered soapstone, with lead, or plumbago, if they are to be black, or with the powdered soapstone with indigo or Prussian blue if they are to be green. Often the facing adds materially to the weight of the tea. In England the use of exhausted leaves is much larger than it is in this country. Spent leaves are bought up from hotels and coffee-houses at merely nominal prices, and are dried and faced before being resold. They are easily detected by their frayed and irregular appearance and by the small proportion of soluble matter remaining in them.

The substitution of other leaves for those of the tea plant is also more common in England than in the United States. Yet even in this country it is well known that foreign leaves can easily be detected by spreading out a few of the leaves from the bottom of the teapot. The lanceolate, spear-head-like shape of the tea leaf, together with its serrated margin, distinguishes it from that of any plant used to counterfeit it. As a rule facings can be detected only by chemical tests. Green teas are oftener adulterated than black teas. Tea is often colored, and if the decoction made by the housekeeper becomes

## EX-GOV. ALTGELD'S WIFE.

Dislikes Social Functions and Loves Her Husband and Nature.

Mrs. John P. Altgeld, wife of the ex-Governor of Illinois, is a tall, dignified woman, and, like Mrs. McKinley, is somewhat of an invalid. Illness, not age, has silvered the hair that once was midnight black, writes a Chicago correspondent. This has only the effect of further softening a face that is wonderfully patient and beautiful. Her eyes are gray, her features are delicate and her mouth expressive. Her face is a mirror which speaks for every emotion she feels.

She has a poet's sensitive appreciation of nature and at last has realized the ambition of her life, to live "near to nature." For years she has tried to persuade Mr. Altgeld to move into the country, where they could have trees and grass and where "even the dirt is clean," as she expresses it. It is only recently, however, that her wish has been realized, and now she lives in a charming home in Rogers Park. She spends most of her time sitting on the broad veranda of her home, watching the leaves develop on the trees, which grow in abundance in that locality, weaving little imaginary stories about the golden dandelions blooming on the lawn and breathing the country air, laden with perfume of lilacs and wild currants. The roses have already begun to bloom again in her cheeks, and she will soon be her old self again under the magic influence of her surroundings. Mrs. Altgeld has no children. She loves her home and prefers the society of her husband to that of any outsider. While she was the first lady of the State it was necessary for her to entertain and go into society, but she has no taste for that kind of life. She dresses quietly, with a slight dash of color here and there, "just for cheerfulness." While she does not enter into politics, she takes a keen interest in Mr. Altgeld's successes and failures, and it is safe to say she has even been the ex-Governor's inspiration in everything he has undertaken.

## TALKS ON ADVERTISING

Some seem to have the idea that advertising is an exact science—that unless a man has studied it he cannot make a success of it. They are wrong. Advertising is not an exact science. We know that the experts make it pay—and we know that others who are a long way from experts make it pay, too. When done in the right way and spirit, and placed in the right mediums, and stuck to perseveringly, it pays always. It is about all we know about it. It is so far from an exact science that no man can come to another man and show him just how, or where, or when an ad. will pay. These are things an advertiser must find out for himself, and the finding out takes time and is a difficult process. A man is liable to get lost, but if he does he may be sure that there is a way out, and that if he keeps pounding away he will find it sooner or later.—Shoe and Leather Gazette.

If you took your little tooter and then lay aside your horn. There's not a soul in ten short days will know that you were born. The man who gathers pumpkins is the man who plows all day, And the man who keeps a humping is the gent who makes it pay. The man who advertises with a short and sudden jerk Is the man who blames the printer because it didn't work. The gent who gets the business has a long and steady pull And keeps the local paper for years and years quite full. He plans his advertisements in a thoughtful, honest way, And keeps forever at it until he makes it pay. He has faith in all the future, can withstand a sudden shock, And like the man of Scripture has his business on a rock.—Kingsley (Iowa) Times.

## YOUNG COXCOMB

Taught a Lesson by an Old Man from the Country. He bore the customary resemblance to a rural visitor. There was the chin beard and the clean-shaven upper lip and the trousers that fell just below his ankles. No wonder the foppishly garbed youth at the end of the car sneered aloud when he entered.

All during the ride up Lincoln avenue the young man smiled at the aged gentleman opposite him. The latter fell to reading a newspaper, but now and then he would look over the top of it and meet the taunting eyes of the young man.

All of a sudden he laid the paper aside and arose from his seat. He grabbed one of the "hold-on" straps and tugged at it frantically. The conductor did not notice his attempt apparently to stop the car, but it nearly drove the young man into hysterics. "Oh, what a Rube!" the old man heard him mutter, and then as though the efforts of the aged gentleman had softened his heart he said: "I'll do it for you," and rising he pulled the motorman's bell. When he had tugged it the regular way the old man resumed his seat.

The car came to a standstill at the corner. The conductor opened the rear door, but no one inside moved. "I guess it was that young feller

over there," answered the old man, nodding toward the youth. "D'ye wanter git off?" inquired the conductor, with a snap. "Why, no," stammered the youth. "I thought that the elderly gentleman did, and I rang the bell for him. He was pulling one of those straps."

Every one saw the position the old man had placed the young man in and all eyes were turned on him. He reddened. "What did you do it for?" asked the conductor, turning to the aged passenger. "I jest wanted to show a thing or two to that young coxcomb over there," was the reply. And he added as the youth ducked for the open door. "I guess I did it."—Chicago Democrat.



THE FAMILY DOCTOR

Very aged persons are often afflicted with itching of the skin without a rash or manifestation of skin disease. This is generally due to weakened nerves, and may be mitigated by baths in warm water faintly tinged with carbolic acid—one teaspoonful of acid to a gallon of water.

Medicines do not very greatly change the effects of varicose veins in the leg. About the best alleviant is a silk elastic stocking. This evens the pressure in the limb and prevents the veins from dilating excessively.

Thin-blooded children who arise with headaches and dizziness in the morning may be greatly benefited by the administration of a half-teaspoonful of solution of albuminate of iron after meals.

A great many nervous people are alarmed at the presence of a fluttering feeling in the throat when they get excited—"a lump that cannot be swallowed." The lump is an imaginary one, due entirely to a slight constriction of the gullet, and may be mitigated with valerian or almost any mild nerve.

"Skin foods" are generally humbugs. There are no foods for the skin differing from foods for the entire body. Some persons, anxious to fill out the cheeks, rub on cod liver oil, but it is the rubbing only that develops the muscles of the face. Freedom from worry and plenty of rest, are the great complexion savers.

Calloused feet are produced by ill-fitting shoes and prolonged standing. They should be pared only when absolutely necessary, as frequent paring favors rapid growth. Soak the feet in hot alum water, one teaspoonful to the quart, every night, and protect the callous by a thin ring of felt.

## GREATEST HEAT.

Electrical Furnace Produces a Temperature that Breaks the Record.

The highest temperature yet produced by man has been reached by an especially constructed furnace at the Columbia University. Prof. Tuckerm, to whom belongs the honor of the experiment, had been working for years on the idea so successfully carried out and has finally generated heat 20 degrees higher than the record made some time ago by Prof. Moisson of Paris. The heat of the sun is estimated at 10,000 degrees. The heat generated at Columbia was 6,500. The effect was tremendous. The electrical furnace was charged with a current of unusual power, which was so high that under it steel, hard quartz and even platinum were vaporized. As for ordinary crucibles, they disappeared at once in a little puff of smoke. It is difficult to appreciate the degree of such heat without some comparisons. Scalding water means a temperature of 212 degrees Fahrenheit and red-hot iron 800 degrees. Steel melts at 3,000 degrees and boils like water at 3,500 degrees. Commercially the experiment is very useful because it has shown that diamonds of marketable size and purity may be made artificially. Further, it has given to commerce two products of almost incalculable value—calcium carbide and silicon carbide.

## The Lunatic's Repartee.

Some visitors were being shown through Kew lunatic asylum, Victoria, a few days ago, and, coming opposite the clock in the corridor, one of them, looking up quickly at his watch, said: "Is that clock right?" "No, you idiot," said a patient standing by; "it wouldn't be in here if it were right."—Melbourne Australasian.

## Flinty Coats for Plants.

If two pieces of sugar cane are rubbed together in the dark they will make a tiny light. This comes from the fact that every reed or cane or leaf of grass has a hard, flinty outside skin, which helps them to stand straight up and also keeps the tender inside from being eaten up by many of the insects.

There is this to the everlasting credit of the farmer's wife: She is kept so busy that she doesn't dress her boy in long curls after he has put on "pants."

Business men are bothered so much with schemes that some of them condemn them all, without investigation.

Between two evils some folks have no choice; they embrace them both.



HOUSEHOLD DEPARTMENT

## Poisonous Wall Paper.

The announcement of Dr. E. M. Chamot, of the chemical department of Cornell University, that nearly all wall paper sold at the present time contains arsenical poisons, some of them in large quantities, casts a shadow over the spirits of the housekeeper who has just had her rooms repapered. What renders the blow still more severe is the assertion that there is no basis for the popular belief that green paper contains the most arsenic. Dr. Chamot's investigations were prompted as a result of the several cases of arsenical poisoning which were said to have been caused by contact with paper-covered walls, the most severe one being traced to red wall paper.

## Milk Sieve Easy to Clean.

A milk sieve, the bottom of which can be removed for the purpose of cleaning, was patented a short time ago by Carl Thiel, of Lubeck. The sieve part can be readily interchanged, and the same sieve can also be used for other purposes therefore by introducing a plate with larger holes. A ring of spring steel holds the sieve plate in position, and it is but a moment's work to take out the spring and the sieve by pressing on the two hooks bent upward, as shown in the cut. For medicinal use this sieve is invaluable, and it is also manufactured with double and filtering sieves.

A lump of sugar represents about as much nutriment as an ounce of potato, but while the potato will be eaten only because hunger prompts, the sugar, because of its taste, may be taken when the appetite has been fully satisfied. Sugar is a useful and valuable food. It must, however, be remembered that it is a concentrated food, and therefore should be eaten in moderate quantities. Further, like other concentrated foods, sugar seems best fitted for assimilation by the body when supplied with other materials which dilute it or give it the necessary bulk.

## To Can Asparagus.

Wash the spears and scrape off any tough outer scales, cut to the length of a fruit jar; pack the jar closely, fill with cold water, add a little salt, and put the lid on loosely. Place the jar in hot water reaching to the brim and boil for three hours, adding enough hot water to that in the jars to keep them full; close the lids tightly and put in cool, dry, dark place. Asparagus freshly cut and in good condition should be used only. To prepare for the table pour off the water and either place the asparagus in boiling water for a few minutes or put the open can in boiling water until hot.

When a patient has been confined to the bed for some time it will often be found a great relief to backache to tuck a smooth pad of cotton under the small of the back. A pillow under the knees at times will also rest one a great deal. "To turn a patient easily on a drawn sheet a yard wide," says a trained nurse, "loosen the drawn sheet at each side of the bed, then draw the sheet gently in whichever direction preferred. It is better to have two people to do this."

## Care of the Sick.

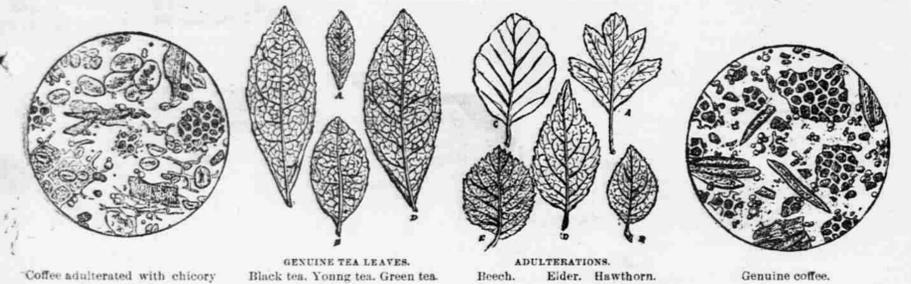
Spiced Rhubarb. Sprinkle 2½ pounds rhubarb peeled and sliced thin with 1 pound sugar. Let stand over night and in the morning drain off the syrup into a preserve kettle, add one cup sugar, half cup water and half cup vinegar. Tie in small cheesecloth bag half teaspoon each of cloves, mace, allspice and ginger and one teaspoon cinnamon; boil until the consistency of syrup, then add the rhubarb and cook until clear. This is a valuable addition to the winter's stores.

## Bread Fudding.

Half pint dry bread broken in small pieces, soften with boiling water, and add one tablespoon butter. Beat two eggs with two tablespoons sugar, mix with bread, then add one cup fresh or canned fruit and any preferred flavoring. Bake twenty minutes. Serve warm or cold with the following sauce: One cup sugar, one egg, heaping tablespoon butter, tablespoon flour. Beat all together, add boiling water until like thick cream, flavor as preferred.

## Rhubarb Pie.

The following is sufficient to fill two pies. They should have both upper and under crusts: One cup chopped rhubarb, one cup sugar, one cup chopped raisins, juice of one lemon, butter size of an egg and one egg. Mix altogether.



Coffee adulterated with chicory and roasted beans. GENUINE TEA LEAVES. Black tea, Young tea, Green tea, Small black tea. ADULTERATIONS. Beech, Elder, Hawthorn, Elm, Wild plum. Genuine coffee.

and sold in the country, and he explained to the investigators the results of his tests.

For instance, he found "pure" alcohol that had been made of menthol and wood sap; brandy that had been manufactured of burnt sugar and water; bread that had been made of potato flour, and even then adulterated with alum and sulphate of copper, substances dangerous to the health of the consumers of that sort of bread; cider made of tartaric acid and colored with caramel; candy made of glucose and artificial essences and colored with poisonous substances; canned goods which had been preserved with salts of copper; butter which had been manufactured from ordinary animal fats and starch, and in which there was an excess of salts; beer that had been made of burnt sugar, licorice, quassia and grains other than barley; cheese that had been made of oleomargarine, with salts of mercury in the rind; cocoa and chocolate that were compounded of sugar, animal fats, flour and starch and ferruginous earths; cayenne pepper that was made of ground rice and flour and salt and a sprinkling of red lead; flour that was made of alum and ground rice; cinnamon that was made of cassia and plainsawdust; ginger that was manufactured of mustard and turmeric; gin that was composed altogether of a mixture of water and sugar and alum and turpentine; honey in the comb that was made of glucose and cane sugar, with the comb molded of

posed of such simple substances, but if mineral matter be added the product is often poisonous to some degree. A few years ago in France the Government seized a factory which employed sulphate of iron in its mixture.

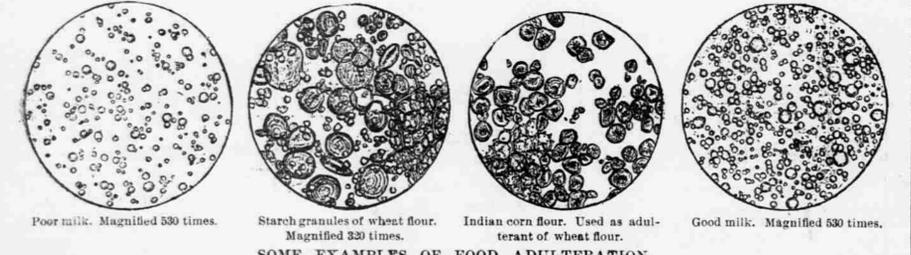
Imitation coffee beans can be distinguished easily from the genuine by a careful examination. Molded as they are, the artificial beans present a uniformity of structure, which is entirely foreign to the real beans. Again, artificial coffee beans will nearly always sink when put in water, while genuine coffee floats. There are several simple and good tests for ground coffee. When a little of the coffee is taken and pressed between the fingers or squeezed in the paper in which it is bought, and it will not form a coherent mass, it is pretty sure to be genuine, but if the grains cake they are not coffee. Even chicory grains will stick to each other, for they are comparatively soft and open, and adhere without difficulty when squeezed. In water chicory and cereals will soften quickly like bread crumbs, while coffee will take a long time to soften; genuine coffee grains will float, as will the whole beans, but chicory or any other sweet root will sink. Chicory or caramel will cause a yellowish or brownish color to diffuse rapidly through the water, but pure coffee will not tint the water for a long time. Such tests are so simple that there appears little excuse for not trying them. Yet manufacturers sell to dealers tons of artificial coffee,

highly colored after being boiled a few minutes adulteration may be suspected.

## List Practically Unlimited.

The list of articles adulterated and their adulterations is practically unlimited, as was stated by Prof. Wiley in his testimony before the Congressional Committee. The adulteration of coffee and tea will serve as types. It is stated that most of the spices sold are wholly fraudulent, as are most of the jellies. Perhaps half of the alcoholic liquors are prepared from neutral spirits doctored and colored to have the taste and appearance of the liquor demanded by the consumer. A type of this adulteration is the recipe given for "pure country cider." It is: To each gallon of water add one-half pound of granulated sugar, acidulate with tartaric acid, and flavor with oil of apple, previously put in alcohol, color with caramel, and to twenty gallons of the mixture add two gallons of genuine country cider.

Frequent cases have been reported of late years of sickness arising from the use of canned meats. The cause seems mainly to have been improper methods of canning, or the use of meat that was tainted before being canned. According to A. J. Wedderburn, of the United States Department of Agriculture, but little risk will be run by the purchaser who carefully examines the outside of the cans which he buys. The heads of the cans should be slightly concave, which shows that they were



Poor milk. Magnified 530 times. Starch granules of wheat flour. Magnified 320 times. Indian corn flour. Used as adulterant of wheat flour. Good milk. Magnified 530 times. SOME EXAMPLES OF FOOD ADULTERATION.

paraffin; lard that was made of starch and cottonseed oil and stearine, and containing alum and caustic lime; mustard that was compounded of flour and turmeric and chromate and sulphate of lead; artificial milk that was sold as "pure condensed milk" and made of burnt sugar, annatto and water; fruit jellies that were made of gelatine and apple parings and flavored with artificial essences; mace that was made of bread dust and venetian red; pickles put up in salts of copper and alum; fruit preserves that were made of the common pumpkin and colored with dangerous substances; sago made of potato starch; powdered sugar, the base of which was rice flour, and which contained also salts of lead and tin, gypsum and marble dust; tea that was made of common leaves and treated with gypsum, china clay and soapstone; vinegar that was made of burnt sugar and sulphuric and hydrochloric acids; wines made of artificial alcohol and water and colored with anilines.

From the testimony of the witnesses before the committee it would seem that more time and ingenuity are expended in producing a counterfeit article than would be required to get nature to produce the real thing. The profit is in producing it in large quantity from waste substances. This is a sort of utilization of the by-product that the country cannot stand for any length of time without serious deterioration of the physical and mental strength of its people, and the status of these crimes and fit punishments for them will undoubtedly be fixed as a result of the report of this committee.

Many Adulterants Poisonous. Many of the adulterations are of such a character as to injure the pocket of the consumer rather than the health. Commercial fraud, according to the testimony of the national and State gov-

which is accepted unquestioningly as the genuine article.

## Poisonous Stuff Is Possible.

Both manufacturers and retail grocers make enormous profits, for their fraudulent coffee can be made for as little as 3 or 4 cents a pound. Often the flour, crackers or cereals which enter into its composition are so badly damaged that they could be utilized in no other way. There is, besides, much huckstering in real coffees, and lower grades are frequently mixed with the higher. Thus Maracibo and La Guayra coffees are mixed with Java and Mocha coffee and the mixture sold for pure Java or pure Mocha.

Cheap cream of tartar has been proved to be composed largely of tartaric acid and terra alba. This terra alba, or white earth, imported from the shores of the Mediterranean, has been used as a food adulterant to a fearful degree. It is, when pulverized, a white and almost impalpable powder, tasteless and looking like a fine starch. Its presence is frequently detected in powdered sugar, which may account for the fact that housekeepers do not find powdered sugar altogether satisfactory for cooking purposes. Pure cream of tartar will dissolve in hot water, but terra alba will not; therefore to test it put a teaspoonful into a tumbler of hot water, allow it to stand for a few moments, and then see whether there is any sediment. If the sediment is large, terra alba is probably present. If it does not dissolve, leaving the water clear, add a few drops of tincture of iodine to the water. If pure, the color will remain unchanged; but if starch is present the water will turn bright blue.

The usual adulterants of tea are "spent" or exhausted tea leaves, leaves of other plants like tea, sand and various materials used for coloring the

hot when sealed. If the heads are convex it shows that decomposition has commenced in the can.

The total value of the food supply of the United States has been estimated at \$5,000,000,000. According to Dr. Wiley's estimate, 90 per cent. of this is adulterated, or \$4,500,000,000. According to the American Grocer's figures, which are the most favorable, not more than 10 per cent. of the adulteration is harmful or injurious to the health. Taking these statements, the result shows that there is \$450,000,000 worth of poisonous food products put annually on the country and \$4,050,000,000 of fraudulent products.

## Very Busy.

May and Edith are sisters, 4 and 5 years old respectively. May had been very naughty, and mamma had taken her over her knee to administer corporal punishment, when Edith suddenly pushed the door ajar and peeped in. Turning her chubby face as far round toward her sister as her peculiar position would admit, May said very gravely:

"Go out, Edie; don't you see I'm busy?"

It is needless to add that mamma granted a respite.

The great naval celebrity was on his way to the safe-deposit vaults with several installments of prize-money. "Hello!" exclaimed an intimate friend; "what have you there?" "These," replied the celebrity, "are the 'fortunes of war' that you read so much about."—Washington Star.

Practical people should quit referring to a woman's husband as her "choice." There are too many cases where he was not a choice, but a necessity.