

A Handy Contrivance. article that is easily damaged by the but do it yourself. Dow, Steuben County, N. Y.

Fertilizing Corn.

Tests made with Tennessee finely ground phon horic rock, twenty-eight per cent. phosphoric acid, 1000 pounds per acre, on my farm, gave results as folle

Where no phosphoric rock was used the corn averaged 48.97 bushels per acre. Where 1000 pounds phosphoric rock was used the corn averaged 65.82 bushels per acre, making a gain of 16.85 bushels per acre over the untreated soil. The soil was thin where tests were made.

The 16.85 bushel gain used 10.11 pounds of phosphoric acld, leaving 128.89 pounds of phosphoric acid for the coming crops. The phosphoric acid becomes available much faster after the second year.

Stall manure, with which 100 pounds phosphoric rock was mixed at time of hauling, made a gain of 17.49 bushels per acre over untreated manure. The manure was used at the rate of nine spreader loads per acre.

By getting the supply of phosphoric acid in this way it is a saving of more than half. The soil is very deficient in this element of plant food .- Ira E. Deer, in the Indiana Farmer.

Foods Rich in Protein.

Besides alfalfa, clover, soy beans, cowpeas and some other legumes which we grow on the farm, wheat bran, linseed meal, cottonseed meal, germ meal, tankage, gluten meal, which is a corn product, and some other concentrates are rich in the nitrogenous element of food so essential to young and growing live stock. When corn is high, the by-products of its by-products will be cheap, and so along the line. In buying any of these feeds, figure the number of bound

cows, then have milk from each cow When going to town with the heavy tested for butter fat and figure out farm wagon, it is often desirable to the most profitable cows. Do not take a few eggs, apples or some other | take some other man's word for it,

jolting of the wagon, and I will tell The percentag. of fat in milk from the readers of the Agricultural a single cow may vary, one day giving Epitomist of a device that I made to different results from the next. In meet this requirement, which works an experiment with a choice Jersey admirably. I took some cast off bed cow the milk was found to range springs attached to boards, and made | from 4.45 per cent. to 5.83 per cent. a little platform large enough to set A single test with a cow may, therethree bushel crates on. This I place fore, be of no value, as in the one in the sottom of the wagon box, then case more milk would be required place the egg crate or whatever else to make a pound of butter than in I wish to carry that requires careful the other, as was shown in the variahandling, and it rides safely .--- F. H. tion of fat with the above experiment. Let the calf stay with the cow a

few hours only, then milk the cow in a few hours after removing the calf and put the bucket of warm milk to the calf's nose so as to touch it, and in a minute or two it will drink, and the work is done. The calf will thus have learned to drink like other animals, and all trouble of feeding milk to it will be over. The mistake usually made is in allowing the young calf to run with the cow several days, and having learned to suck, it is hard to teach it any other way .- Epitomist.

Feeding Fat Into Milk.

Dairymen have been divided in their opinion as to whether or not it is possible to increase the fat content of milk by different methods of feeding, and particularly by the feeding of an increased amount of fat in the food. The experiment stations long since proved that it was not possible to feed fat into milk, but some dairymen have been slow to accept the facts in the case

Professor Jordan, of the Geneva (New York) Experiment Station, has completed a test that is conclusive. He sent 1000 pounds chopped hay and 1500 pounds of cornmeal and ground oats to a linseed oil company, and extract all had this company the fat from the feed. This company makes finseed meal by extracting the oil or fat from the flax seed, and they are therefore prepared

to extract all the fat, or at least their process leaves only a trace of fat is the material treated.

A Jersey cow, young and vigorous, was chosen for the trial. She was thin in flesh and four months after calving. At first this cow was given a normal ration, consisting of uncorn will be high. If oats are cheap, treated timothy hay, cornmeal, ground oats and wheat gluten. Her milk yield and butter fat content of milk for this period are carefully recorded.



✤ -Cartoon by Washburn, in the Pittsburg Dispatch.

AN APPEAL TO PUBLIC-SPIRITED PERSONS FOR ASSISTANCE IN CORRECTING SOME ERRONEOUS POPULAR OPINIONS.

THE UNITED STATES CENSUS, APRIL 15, 1910.

The enumeration of the population during a census of the United States always presents numerous difficulties; chiefly, the apprehension of a large element that their answers to the enumerators' questions will cause increased taxation, legal entanglements, or injurious consequences to their persons and property.

In order to quiet such unfounded fears, which would, unless removed, materially affect the coming census, April 15, next, the Census Bureau has prepared the subjoined brief statement relative to the decennial census, its origin, purpose, and uses.

It should furnish complete assurance to those concerned that information given the enumerators is held by the Census Bureau in the strictest confidence, with reference to the identity of the informants, as required by the policy of the Bureau and commanded by the law of the United States.

It is, therefore, earnestly hoped that Clergymen, Priests, Physicians, School-Teachers, Employers, and other public-spirited citizens who come in contact with large numbers of people will co-sperate with the Census Bureau by telling persons who are believed to entertain erroneous opinions of the census the real facts, urging them to give full replies to the enumerators. Teachers are particularly requested to speak of the census to the school children and ask them to tell their parents about it.

For further particulars, or such other printed census information as there is on the subject, please address the Supervisor of your Census District. Very truly,

E. DANA DURAND, Director, Bureau of the Census.

OFFICIAL STATEMENT BY THE DIRECTOR OF THE CENSUS.

On April 15, in the present year, 1910, the census of the United States begins. It occurs every ten years,

It is the basis of the distribution among the States of representation in the National House of Representatives. It is also the means by which the United States Government ascertains

the increase in the population, agriculture, industries, and resources of the Nation.

It is required by the Constitution and by act of Congress.

CENSUS FOR STATISTICAL PURPOSES ONLY.

The information sought will be used solely for general statistical purposes. It will neither be published nor used in any other way to disclose facts regarding any individual or enterprise.

The census is not, never has been, and can not be employed to obtain information that can be used in any way in the assessment of property for purposes of taxation or the collection of taxes, National, State, or local; for deportation proceedings; extradition measures; Army or Navy conscription; compulsory school attendance; child-labor law prosecutions; quarantine regulations; or in any way to affect the life, liberty, or property of any person. It has nothing whatever to do with the detection, arrest, prosecution, or punishment of any person, for any suspected, or actual, violation of a law, whether of a city, or State, or the National Government, or of a foreign nation.



HOUSEHOLD MATTERS Com

Experiments in Ireland go to show that ten tons of peat have the "calo rific value" of one ton of ordinary coal.

Professor Herdman, lecturing at the Royal institution, and describing how to tell the age of a fish, said the lincs on the scales of the herring are lines of annual growth. The number Housekeeping. of lines on the bones are another indication .- Westminster Gazette.

Heretofore photographers have had to guess at distances to get their focusses. If a photographer was a bad guesser on a long distance picture he got a poor plate. A Massachusetts man, who probably spoiled a few plates himself, designed a range-finder to get over the difficulty

A new German invention is an nounced which may serve as a usefu substitute for celluloid, especially where the color of the article is not of importance. It is made from crystallized carbolic acid and formaldehyde, and the resulting product is an almost transparent ruby colored substance, which is not liable to take fire, By the introduction of a white pigment the color can be modified. A cinematograph film which it is impossible to set alight is also being made on the Continent with consider able success .- London Daily Mail.

Dr. R. Marloth has discovered in South Africa six species of plants that possess "window leaves." They are ginger cut into thin circles. When all stemless succulents, and the eggshaped leaves are embedded in the ground, only the apexes remaining visible. This visible part of the leaves is flat or convex on the surface ginger syrup. and colorless, so that the light can penetrate it and reach the interior of the leaf below, which is green on the inside. With the exception of the blunt apex, no part of the leaf is permeable to the light, being surrounded when cold add a cupful of lemon juice by the soil in which it is buried.

Ironing linen has a greater effect than is commonly believed. As the temperature of the iron may greatly exceed 266 degrees Fahrenheit it has been suggested that the process of ironing may suffice to sterilize surgical dressings and hence be of valuable service, especially in rural districts and elsewhere, in the absence of disinfecting ovens and sterilizers, Nearly all microbes can be killed by a sufficiently long application of a temperature of 158 degrees Fahrenheit, but a temperature of 266 degrees Fahrenheit is required to kill certain spores of bacteria and to produce absolutely complete steriliza tion.

The Nation's Skull-Making. Scientists, like poets, can be dith

in immigrants to this country, or at

least that portion of the report which

seems to show that structural changes

follow mere living in this country,

owing to better nutrition, etc. Of

course where there are inter-mar-

Use For Discarded Feather Leds. Put a small portion of the feathers cto a tick made of muslin the size of tour bed, spread feathers out evenly, ack the case closely on quilting 'rames, cover with pretty silkoline ind knot or tie as you do a comforaile, using either worsted or ribbon. A most excellent substitute for a lown quilt is the result .--- Everyday

Floor Borders of Matting.

We decided, instead of purchasing new carpet for a room, to buy a rug. This necessitated staining or otherwise treating the floor which would show outside the rug. As the floor was very poor, we decided not to treat it, but to buy matting. This we illowed to extend a few inches under the rug, and we planned, if necessary, to cover the rest of the floor under he rug with newspapers. But we lound that the ridge where the matting ended was not noticeable. The expense of the matting was small, and it was put down in a very short time, while if we had stained and biled the floor it would have prevented our using the room (and it happened to be a room we used constant. ly) for some time .- C. K. F., iv House and Garden.

Four Ways to Use Ginger.

A plain lemon jelly, prepared according to directions on the package of gelatine, becomes comething novel by stirring into it some preserved firm, cut the jelly into two-inch blocks. Serve there or four to a dish. topped with whipped, sweetened cream, flavored with a little of the

To make lemon ginger sherbet, boil two cupfuls of water and a cuptul of sugar for fifteen minutes and add a teaspoonful of gelatine dissolved in warm water. Strain, and and five tablespoonfuls of ginger syrup. Freeze, and when quite stiff stir in two tablespoonfuls of preserved ginger, chopped very fine; pack in salt and ice till serving time.

For a beverage for unexpected company, nothing will give more safisfaction than ginger ale. Dissolve three tablespoonfuls of ground ginger in hot water, just barely to cover. Let it boil for five minutes and cool, then pour it into a bottle with three cupfuls of ice-cold water, one tablespoonful of lemon juice, and sugar to sweeten to taste. As a last ingredient drop in a heaping teaspoonful of supercarbonate of soda, and cork the bottle, hammering the cork down lightly. Shake the bottle well before serving the beverage, and the cork will pop out. This ale will have the finest kind of a fizz and snap to it.

A variation of the ordinary dessert of a cream delicacy may be m

of protein in a ton, and then, knowing the price asked per ton, it can be readily learned what a pound of protein costs. In this way you know which food is the cheapest source of protein.

Most of the grains that go to produce this list of by-products are rich in carbohydrates, but as the manuof the grain to make his product, he sold to him; that is, better for producing milk or growth. He not only does this, but he grinds and cooks these foods and maker them very palatable.---Indiana Farmer.

How to Thaw a Frozen Stock Pump.

At this time of severe cold weather in the kitchen. It may be worth the fat is derived from this source. something to know that, with a small pleasantly as to cut the kindling.

Get a piece of quarter-inch gas juvenator to the system. pipe about five feet long, with a and keep your syc on the pire. When hundred pounds of carbohydrates. Farmer.

Testing the Cow.

There is much variation in the yield and quality of milk from the cows, and no farmer can have a herd uniform unless he breeds for uniformity by adhering to one breed; it may even be necessary to rely on some particular family of the selected breed. Even then close and careful culling of the herd will be necessary to secure difference there is in the yield of the Chicago Record-Herald.

Then her food was changed, and she was fed the prepared feeds, free from fat. If the cow must derive her milk fat from the fat in the feed, something unusual must happen, because there is not sufficient fat in the feed to account for the large amount of fat in the milk. The cow gave tha facturer wishes this particular part normal amount of milk and fat, and gained in weight on the fat free feed. returns the grain better than when Professor Jordan found that the cow produced sixty-three pounds of fat, and her feed only contained twelve pounds of fat, of which she digested only six pounds. The cow gained in flesh and grew somewhat fatter during the trial.

We naturally ask them from whence comes the fat. Professor Jorthe farmer and his family are often dan determined the amount of promuch inconvenienced by finding the tein in the feeds, and the amount that stock pump frozen up solid in the was digested, and the amount that morning, and all efforts to thaw it appeared in the casein and albumen with salt or hot water are slow and of the milk, and after deducting all ofttimes wholly ineffective, as the hot these amounts of protein, he found water runs out at the spot, while that that only a very small part of the fat below in contact with the ice soon be- in the milk could have been derived comes cold, doing no work. The pump from the protein part of the feed, and must finally be taken out and thawed he believes that practically none of

The protein part of the ration is tool costing but a few pennies, the needed, however, to furnish the promost stubborn in curl frozen pump tein part of the milk, and to build up can be thawed out just as easily and the protein parts of the body, and protein acts as a stimulant and re-

By elimination we are driven to the coupling on one end, and tie a piece conclusion that practically all of the of binder twine, or other string about fat in the milk is derived from other a yard long, underneath the coupling, parts of the feeds than the fat and and you are prepared. Slip the pipe protein. These other constituents of down along the sucker rod, till the feeds are starches, sugars and woody lower end rests on the ice. By means fibre, all three of which constituents of a small funnel pour hot water in we call carbohydrates, and these above, and the pipe will sink a hole same constituents build up the sugars down through the ice as fast as an in the milk, and give heat and energy auger would bore. Hold to the string to the animal. This cow ate several it drops through, hold it there and The cow, then, derives a very large pour in more hot water, which will part of the fat, if not all of it, from be delivered below the ice and will the carbohydrates. The fats are made thaw out all the rest, running out up of the three chemical elements, cold at the spout contrary as would carbon, hydrogen and oxygen, and the otherwise. One application will pay carbohydrates contain the same idenfor itself, and convince you that it tical elements, or component parts, is just as easy to thaw the pump as except that they are arranged a little feed the chickens or sweep the walks. differently in the mixture. The cow -F. W. Shuls, in the Indiana has the ability to take one form of the mixture and change the relation of the parts somewhat and thus produce fat.

Professor Jordan is a patient, painstaking investigator, and we owe him a debt of gratitude for proving so convincingly that the source of the fat in the milk is the carbohydrate part of the feed .--- Inland Farmer.

A Poor Excuse,

The worst thing about a poor exuniformity in richness of tilk. Have cuse is that it seldom serves the purmeasures and scales, learn how much pose for which it was intended,-

CENSUS INQUIRIES DEFINED BY CONGRESS.

The census inquiries are defined by act of Congress. The questions on the schedules are framed by the Director of the Census in conformity with that act. They apply to all persons living in the United States on April 15, next, the "Census Day." The same questions are asked about each person. All persons must answer all the questions.

THE QUESTIONS REGARDING PERSONS.

The census law, with reference to population, requires that the enum erator's questions shall, for each inhabitant, call for:

'The name, relationship to head of family, color, sex, age, conjugal condition, place of birth, place of birth of parents, number of years in the United States, citizenship, occupation, whether or not employer or employe, and, if employe, whether or not employed at the date of enumeration (April 15, 1910), and the number of months unemployed during the preceding calendar year (1909), whether or not engaged in agriculture, school attendance, literacy, and tenure of home, and whether or not a survivor of the Union or Confederate Army or Navy; and the name and address of each blind or deaf and dumb person.

THE QUESTIONS REGARDING AGRICULTURE.

The same law, with reference to agriculture, requires that the enumerator's questions shall call for;

"The name, color, and country of birth of occupant of each farm, tenure, acreage of farm, acreage of woodland and character of timber thereon, value of farm and improvements, value of farm implements, number and value of livestock on farms and ranges, number and value of domestic animals not on farms and ranges, and the acreage of crops planted and to be planted during the year of enumoration (1910), and the acreage of crops and the quantity and value of crops and other farm products for the year ending December thirty-first (1909) next preceding the enumeration."

BADGES WORN BY CENSUS ENUMERATORS.

Census enumerators wearing badges with "U. S. Census 1910" stamped on them, will go from house to house, and farm to farm, beginning April 15. They are not to be regarded as spies, detectives, policemen, constables, tax assessors, or officers of any city, county, or State. They are employed by the U. S. Bureau of the Census. They do not represent any other Department of the United States Government, or any foreign nation.

REPLIES TO ENUMERATORS STRICTLY CONFIDENTIAL.

Replies to enumerators are, and must be, held by the Census Bureau in strict and absolute confidence.

All the U. S. Census officials, supervisors, supervisors' clerks, enumerators, and interpreters, before entering upon their duties, are obliged to take a solemn oath not to disclose any information they may obtain, except to the Census Bureau, and a violation of the United States law in regard to this oath means a \$1000 fine, or imprisonment for two years, or both, in the discretion of the Court.

PENALTIES FOR FAILURE TO ANSWER QUESTIONS.

If any adult person refuses or willfully neglects to answer an enumerator's questions, or, if any person willfully gives answers that are false, he or she can be arrested, carried to court, and fined up to \$100. Keepers of hotels, apartment houses, boarding or lodging houses, tenements or other buildings, in which persons make their homes, must help the enumerator when asked, or they will be liable to arrest and punishment by a fine up to \$500.

E. DANA DURAND, Director.

Think Government Gave Roose-

velts Unwarranted Privilege.

Liverpool, England, --- The Post says: "There is some soreness among big game shots over the Roosevelt expedition.

"They are asking why the British special facilities to the expedition. which has resulted in the acquisition used as the work house. Several will by America of very rare specimens which up to now are conspicuous by their absence from museums in Eng-

tages and a blending of types in parents it is to be expected, and is visible to the most careless observer But, after all, what we are more conerned with is the Americanizing of the contents of the skull. American natters and milliners can be depended on to produce hats to fit any shape of head.-Boston Herald. Warship Built Into House. Timbers of the famous battleship ports and rafters in the \$200,000

> Greenwich, Conn. Mr. Stokes, when nary way. he bought the timbers in England, was not indulging himself in things historic, although such materia: in the house will add greatly to its interest. His idea was to get good, strong wood, and the timbers from the Wellington are of teak, which is bake in moderate oven for twenty prized because of its great durability. Most of the timbers will be used as rafters in the great dining room.

In England there are several firms that make a specialty of breaking up old vessels to get teak and other val uable woods .- Popular Mechanics.

Japanese Adaptability.

The readiness of Japan and China in adapting themselves to Western methods of electrification, says the Railway News, is to-day amply evidenced in the work going on in the large cities of these two countries Yokohama has its electric tramways. Tokio, the capital of Japan, has a fine system of electric railways. The railway engineers and directors are Japanese. Shanghai has recently completed a splendid system of tramways, and Hong-Kong has operated street railways for several years with good results. There are many other cities in Japan and China which will undoubtedly follow the example of these cities.

Heads of Philadelphia's police department plan to equip each patrolman with a pocket electric search-) laste. Thicken with small quantity of light.

rambic and rhapsodical, and lead gov- ginger. Prepare the cream as for ernments into publishing works of charlotte russe, and, as you beat it fiction in the guise of reports of in- stiff, stir in preserved or crystallized vestigations. So while admitting to ginger that has been cut into shreds the full all that the American envi- with a sharp knife, and a little of the ronment does in affecting and modi- rich syrup, the quantity to be guaged fying the inner being, mental outlook by tasting the cream after mixing. and social customs of the many races Keep the cream in an ice-cold place which come from abroad, it will be until serving, and top each glass of with considerable skepticism that eth- cream with a cube of preserved ginnologists read the latest report of the ger. Accompany the cream with ginmmigration bureau on quickly at- ger wafers or soft gingerbread.-T ained physical modifications, noted C. C., in Suburban Life.



Sour Milk Muffins .- A pint of sour milk, one egg and a little salt, z teaspoonful of soda and a tablespoonful of butter. Have the griddle moderately hot, grease well, and also the rings.

Mock Oysters .- Grate six ears of corn, one egg, two tablespoons milk, pepper and salt, teaspoon baking pow-Wellington are heing used as sup- der and flour enough to make a batter suitable for frying. This is nice esidence of I. N. Phelps Stokes, at for using corn too old to cat in ordi-

> Corn Meal Gems .- Take two cupfuls of corn meal, sift well, and add one egg, four tablespoonfuls of melted butter, one-third teaspoonful of salt, a teaspoonful of soda and a supful of sour milk. Put in gem pans and minutes.

> Cranberry Pie .- One pint of cranerries, chopped, one cup sugar, onehalf cup molasses, one tablespoon cornstarch dissolved in little cold water, then add two-thirds cup boiling hot water; bake with two crusts or with strips across. This makes two ples.

Bean Rabbit .- Melt two tablespoons of butter add one teaspoon of salt, one-eighth teasuoon of panrika, one-half cup of milk and one cup of cold mashed beans; stir until thoroughly heated and add one-half cup of grated cheese. As soon as the cheese has melted scrve on sma.) slices of toasted bread.

Tomato Soup .- Take the bones that are taken from a shoulder of lamb, put into cold water, enough te cover the bones. Cut fine one goodsized onion, put in with the bones. Cook until the meat falls from the bones. Strain, then add one-half can tomatoes; cook till they are done. Strain, put back into the kettle, add one-fourth teaspoon cinnamon, one tablespoon sugar, salt and pepper to flour.

an aero club, and voted to begin at once to build aeroplanes. About forty undergradutes joined the organization and pledged themselves to start Government should have afforded work constructing machines. The old hoathouse at Lake Whitney will be

make flights before Commencement. Max Van Hoegen, president of the club, has served in the German army land, and as yet has denied the privil-ege of these preserves to Englishmen." In in the latter's trips last year.

Yale Students Will Build Their

Own Machines and Take Flights, New Haven, Conn .- Yale formed