NATIONAL CAPITAL AFFAIRS

Census Shows Increased Farm Values

WASHINGTON.—The value of farm land per acre in the north central states has practically doubled in the last ten years, according to a bulletin issued by the census bureau. The total value of farm lands and buildings in the division has increased from less than $10,000,000 in 1900 to more than $20,000,000 in 1910, while the number of farmers has increased only a fraction of one per cent.

More than two-thirds of the farmers in the section own their own farms, while more than half these owners have their land free from mortgage. A slight decrease from 1900 is shown in the number of owners, while the tenant farmers have increased by more than twenty per cent. A significant feature of the bulletin is the indication given that the older states of the section are decreasing in agricultural importance, presumably owing to increases in urban manufacturing populations.

The total amount of land included in farms in 1910 was reported as 349,962,000 acres, as compared with 317,349,000 acres in 1900, an increase of 32,613,000 acres, or ten per cent. This important increase is largely due to the extension of agricultural activities into western North and South Dakotas, Nebraska and Kansas, and into northern Minnesota, Wisconsin and Michigan. These increases offset important decreases in other sections.

The increases in total farm acreage, in the order of their importance, are: North Dakota, 83 per cent.; South Dakota, 36 per cent.; Nebraska, 29 per cent.; Michigan, 8 per cent.; Wisconsin, 6 per cent.; Minnesota, 5 per cent.; Kansas, 4 per cent., and Missouri, 2 per cent. The decreases are: Iowa, Indiana and Ohio, each 2 per cent., and Illinois, 1 per cent. There are also important decreases in the older sections of the other states.

Each of the states on the western border of the division, and those along the Canadian border, show increases in the number of farms. These increases, in the order of their importance, are: North Dakota, 64 per cent.; South Dakota, 47 per cent.; Nebraska, 6 per cent.; Wisconsin, 4 per cent.; Kansas and Michigan, each 2 per cent, and Minnesota, 1 per cent.

How Dr. Graham Bell Keeps Away Heat

DURING the recent heat waves, costing in six days 120 lives in New York city alone, Dr. Alexander Graham Bell, the inventor of the telephone, stoked up the ice stove, his newest invention, in his Washington home, and felt quite comfortably cool while others were sweltering in an atmosphere from which there appeared to be no prospects of relief. Doctor Bell is not going to patent his ice stove. Now that he has given it a

Doctor Bell's ice stove is the exact opposite of the ordinary coal furnace. While the latter consumes coal and radiates heat to keep up the temperature, the former consumes ice and radiates cooling waves of air to keep it down.

On the ground floor of Doctor Bell's Washington residence is what was once a swimming tank. Having been built to hold water, it can safely be depended upon to hold cold air. It is a well known fact that cold air is heavier than warm air. Everybody has noticed that when a window is opened in a room in cold weather the feet feel

the cold first. This is because the admitted cold air has fallen to the floor. So if cold air was poured into the ordinary room it would flow out under doors and through floor cracks wherever it could find them.

In addition to the old swimming tank, which Doctor Bell has fitted up as a study, with easy chair, couch and table and books, the inventor needed an apparatus for supplying cold air to the tank. This was a simple matter. A large ice box was constructed and into this about 200 pounds of ice are fed twice every week. Air pipes lead into the ice box and other pipes convey the chilled air into the inventor's study, the flow being regulated by an electric fan.

Wireless Telegraph for the Cavalry

THE military value of the cavalry branch has been enormously increased by the adoption of wireless telegraphy, for the first time in this country thoroughly tried out in the Texas maneuvers.

The signal corps had devised an extremely light and portable wireless apparatus, easily carried on the back of a horse and capable of being put into operation from any point in the field within a few minutes. It was found that the messages could be readily received when the cavalry detachment was anywhere within twenty-five miles of a receiving station, a fact which added greatly to the value of the cavalry in its scouting capacity. A light collapsible steel mast, not much larger than a fishing rod, served to support the antennae necessary to establish communication.

The real purpose of the recent great assemblage of troops in Texas, aside from internatfonal considerations, was the creation of one tremendous military unit, and that was successfully accomplished for the first time since the Civil war, in the opinion of Major General Carter

Five times the cost of this operation would not measure the value to the country of the experiment, declared General Carter. It was the first opportunity that the modern army had to get together all branches of the service—the infantry, the cavalry, the artillery, the transportation and subsistence departments—and to make a thorough test of what had been purely theoretical estimates of the proper balance between them.

Interior Department Issues Warning

COMPLAINTS have been received from settlers on reclamation projects that by reason of the misrepresentations of land agents they have been induced to purchase lands which were afterward found to be without any rights to water from the government canals. The secretary of the interior issued a warning which, while it refers particularly to the Rio Grande project in New Mexico and Texas, is equally applicable to other projects containing large areas of private lands.

"All persons are warned against accepting any statements concerning this project without inquiry from the officers of the reclamation service. Experience has shown that some warning of this kind is necessary because misleading statements have been issued regarding the project and the conditions existing upon it.

"In particular, attention is directed to the requirements of the reclamation act regarding residence and cultivation. The act prescribes that no right to the use of water for land in private ownership shall be sold for a tract exceeding 160 acres to any one land owner, and that no such sale shall be made to any land owner unless he be an actual bona-fide resident on such land or occupant thereof, residing in the neighborhood of said land.

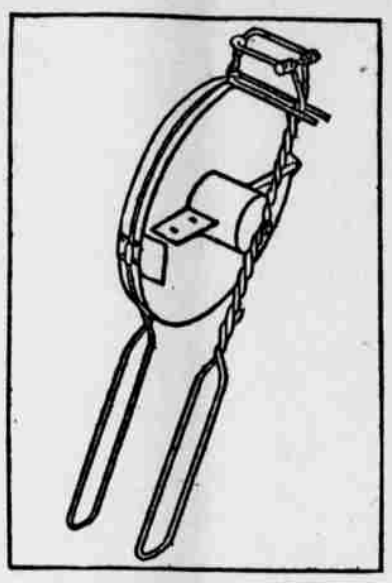
"It also is required that the land owner shall reclaim at least one-half of the total irrigable area of his land for agricultural purposes before any right to the use of water shall permanently attach.

"It is not known how many years will be required for the construction of the storage dam, nor is it safe to make predictions as to when water will be available in view of the many uncertainties existing. Warning also is given that the amount of available water power has been grossly exaggerated in many current discussions."

NOVEL BUT TOO ELABORATE

Device for Separating Whites and Yolks of Eggs Invented by an Oregon Man.

An ingenious but rather elaborate egg separator has been invented by an Oregon man. A concave plate with a lip on one side has a yolk-receiving socket and a revolving cup, mounted on a lever, fits down over this socket. By bringing the cup down the egg is



Revolving Arm Cleans Plate.

cracked and the white flows out into the plate, while the yolk is retained in the socket. The cup also has a cleaning arm extending from it and by turning the cup this arm can be made to clean the plate, the contents of which can be poured through the lip into the cup or other receptacle waiting. Of course the yolk of the egg is not broken in this operation or it would run into the white. As it is, the yolk and shell are removed from the cup of the separator afterward. The experienced cook, however, would probably regard such an apparatus as more interesting than necessary.

CUCUMBER CUPS ARE GOOD

Salad-Like Dish That Is Attractive and Not at All Difficult to Make.

To make cucumber cups pare large, well-shaped cucumbers, cut each in four pieces crosswise, and cut a slice off the two ends so that they will stand cuplike; hollow out the centers, stand the cups on a few leaves of lettuce and fill with the tartar sauce, arranging the left-over bits of cucumber at the base.

To prepare the sauce set a bowl on some pieces of ice, and put into it a saltspoonful each of mustard and salt, with two of sugar, and a pinch of cayenne; drop in the yolks of two eggs, stir until mixed and begin whisking with a wire whisk while you add slowly a gill of olive oil, diluting, for fear it should become too thick, with three teaspoonfuls, gradually, of vinegar.

When ready to serve add a teaspoonful each of chopped capers, pickles, parsley, olives and shallots, and a few drops of Tarragon vinegar. Those who go in for changes may like this better than the ever-delicious plain French dressing, for tablespoonfuls of olive oil beaten with pepper and salt, and then, still beating, a tablespoonful of vinegar, drop by drop, on thinly sliced cucumber.

Lemon Pie.

Line pie plate with crust and bake. Make crust with two cups of flour and one-half cup of lard, a little water and teaspoon salt. Take double boiler and put in a cup of sugar with two rounding tablespoons flour. Mix well. Grate the rind of one lemon; add the juice and yolks of three eggs, with salt. Stir all together and add a cup of boiling water. Cook until thick. Beat the whites of the three eggs, add sugar and spread over the filling and brown in the oven.

Broiled Eggplant.

Remove the skin from a raw eggplant, cut it in slices a quarter of an inch thick. Lay them on a greased broiler, cook until done. Turn frequently to keep from burning. The same result may be achieved by laying the slices on a hot griddle such as you use for pancakes, greasing with a bit of suet. Draw griddle to back of stove where the eggplant will cook through slowly without burining. Serve on toast slightly moistened with hot water.

Melting Potatoes.

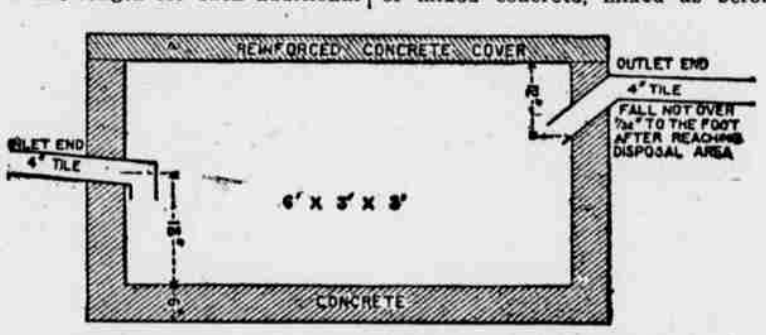
Wash, peel and boil in salted water about eight potatoes. When done drain and dry over the fire for a moment. Take each potato and press it firmly in a cloth so as to give it a round shape. Place in a buttered baking dish, pour over half a pint of stock, put a piece of butter on each potato, season with salt and pepper and bake in the oven until the potatoes have absorbed all the stock. Potatoes cooked in this way melt in the mouth, hence the name

SATISFACTORY METHOD OF DISPOSING OF FARM SEWAGE

Ordinary Cesspool Is Best and Cheapest Plan—Anyone Who Can Pile One Stone on Top of Another Can Construct Tank, Which Should Be Large Enough to Hold One Day's Refuse.

Many have been deterred from having bathrooms, etc., because of lack of a way to dispose of the sewage. A few have water systems installed, and the waste has been run into streams or old-fashioned cesspools, which are dangerous things unless very far removed from the water supply. A proper cesspool is the best and cheapest method of disposing of the sewage from the farm home. Do not be scared out because some scientific fellow has called what you want an anaerobic tank or a septic tank. It is really nothing mut a plain, ordinary cesspool that does not "cess," writes Dr. E. M. Santee of New York in the New England Homestead. Anyone who is able to pile one stone above another can make one. It is a tank made tight, so the liquids are held until the fecal matter is converted into liquids or gases by the growth of bacteria that all fecal matter contains.

It should be large enough to hold all of the sewage that accumulates in a day from the home. It should be made longer than wide. One should never be made less than six feet long by three feet deep and three feet wide. This is large enough for a family of six grown people. Add one foot to the length for each additional person. The secret of success lies in the way that the sewage goes in and how the clear water comes out. The top of the tank should be below the level of the point where the sewer pipe leaves the cellar. As the inlet pipe enters one end of the tank, it should have an elbow that turns down to within 18 inches of the bottom. This pipe should be four inches in diameter and have tight joints. The fall in it should be not less than one-fourth inch to the foot.



Well Arranged Cesspool for Sewage—Cross Section.

The outlet pipe should dip down, so that the inner end is 12 inches below the top of the tank, and the outer end should be only about one inch below the top of the tank. This tank may be located anywhere outside of the cellar wall where the fall may be had. The water from it has to be run into a loose-jointed pipe about eight feet long for each person in the family, unless the soil be heavy clay, when the length should be doubled. It should be laid in a ditch 12 inches deep. This pipe should at least be three inches in diameter, and larger is better; it should have a fall of about 1-32 of an inch to the foot, and may be located anywhere the soil is loose. A vegetable garden or a lawn is ideal for it. It should be connected with the overflow pipe by tight-jointed sewer pipe that has a fall of not less than 1-16 inch to the foot.

The tank, when finished, should be tightly covered, without ventilation. When it is working right there will be a green scum on the surface of the liquids. It does not freeze in winter because heat is generated in the decomposition, and the water that is constantly being emptied into it is far above the freezing point. This system is not an experiment; it has been successfully used for many years.

Provide a load of field stone, not too large, a load of gravel, not too coarse, five sacks of cement and a box the right length for the family, three feet wide and three feet long, with no bottom, and tile according to the distance away from the house. Dig a pit at least four feet deep, four feet four inches wide and 16 inches longer than the box. The depth should vary according to length of fall between the house and the disposal field, where the loose-jointed pipe is to be located.

Mix half a bushel of cement with three bushels of gravel. Be sure there are no streaks in it when mixed, then add enough water to make a rather thin paste. Mix thoroughly again, and, after placing a layer of stone in the bottom of the pit, throw in the concrete and level off. Let stand until the next morning and place the box an equal distance from each bank of the pit. Cut holes in each end of box for inlet and outlet pipes, and place these pipes in position.

Put in a layer of stone around the outside of the box, and then a layer of mixed concrete, mixed as before Alternate stone and concrete until the top of the box is reached, the last layer being concrete, so that it may be choked off level with the top of the box. Put the stone back from the box and use spade or shingle as in the spring, so that the inside may be smooth. The top may be covered with plank or a concrete slab. The latter costs no more and is permanent. To make this slab make a box the size of the outside of the tank and four inches deep. Put in about one inch in depth of concrete, made as before; lay in old pipe or old iron of any kind about eight inches apart and extending nearly across the box; then fill up with concrete and stroke off level with the edge of the box.

After the concrete is thoroughly dry remove the box from the pit, wet the inside walls and floor, mix some clear cement and water to the consistency of batter, and, with a trowel, smooth up the inside with this mortar; then take an old whitewash brush and put on a wash made of clear cement and water about like thin cream. This will make the inside smooth and water-tight. Place the cover on, cover it up, connect to the house plumbing and the loose-jointed pipe in the 12-inch ditch to the overflow pipe; cover all and allow the sewage from all parts of the home to flow in.

Do not add disinfectants; they will stop the action that is so necessary to success. This tank will not have to be cleaned, as all solid matter is destroyed except the mineral portion, which is so small in farm sewage that it would not amount to one-half inch in depth in a year.

POTATOES WIN FIRST PRIZE

All New England appreciates good times. Here are some Good Times potatoes, grown by Joseph D. and Ross G. Wood of Windsor county, Vt. That is the name of the variety, and they attracted considerable attention when displayed at the Vermont state fair, where they won first prize.