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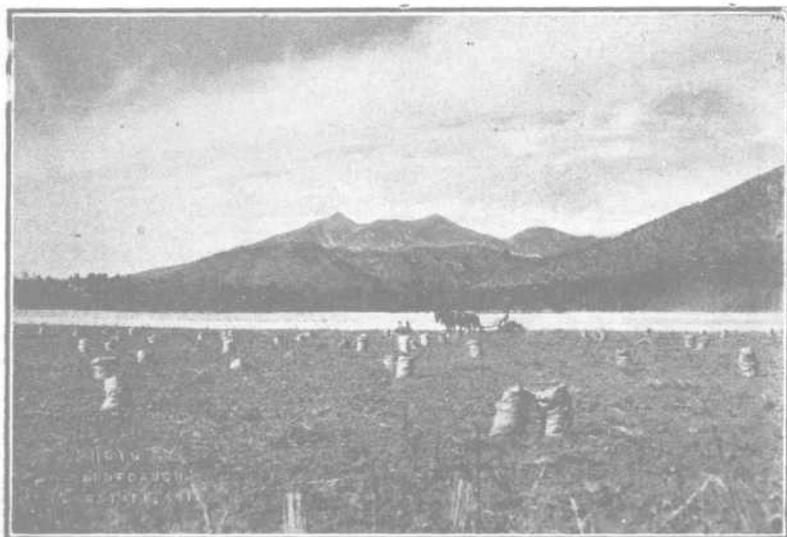
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POTATOES The Million Dollar Industry

HOW THEY GROW AND HOW TO USE THEM

By ROSA BOUTON, Home Demonstration Agent
Coconino-Navajo-Apache Counties



DIGGING POTATOES

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POTATOES

The Million Dollar Industry in Coconino County



CULTIVATING SPUDS

Oh, the Spud, the wondrous Spud,
 Could he do so, tell he 'wud'
All the things we say about him
 In Coconino County.
Could he take to all the markets,
 In mountain, desert, camp and valley,
Stories of his place in larder,
 Tales of how he heads the menu,
How he's welcomed by the housewife,
 How the children squeal and greet him,
How the fathers peel and eat him
 At the happy dinner hour,
Then the farmers soon could sell
 All the spuds that grow so well
In Coconino County.
 And their pockets soon they'd fill
With nickel, dime, and dollar bill
 In Coconino County.

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POTATOES

WHERE POTATOES GROW

In Coconino County, Arizona, around about Flagstaff and Williams and between the two places, people raise potatoes, think potatoes, eat potatoes, yes and sometimes sleep with potatoes, not only figuratively but literally, for until the Marketing Association of the Farm Bureau makes its prospective storage houses a reality, farmers must store their potatoes as best they can in pits, dugouts, and barns.

One cold night last winter when the mercury was falling way below zero, a thrifty farmer who had thousands of sacks of potatoes stored in his barn, instead of getting into his comfortable bed at nine o'clock, lighted his coal oil stove and took it with him to his barn where he slept with his potatoes, waking at intervals to see that all was well, even as a faithful nurse sleeps and watches her patients.

HISTORY

Though the potato is one of our best known and most widely used foods it is not mentioned in Ancient History. Four hundred years ago it was not known to the civilized world. We are indebted to our South American neighbors for this food, which was discovered about the middle of the sixteenth century by Spanish explorers. By them it was carried to European countries and our own America. Its first name was "Battata" which means "Papa", but how it gained its trade name "The Spud", is not definitely known, but it is probably derived from the Irish "Spaddy", one who digs with a spade.

One of the stories of its introduction into festive circles is as follows: Through Italy the potato went to Belgium. The Belgians were on good terms with the French and desiring to give expression to their friendliness sent to the King of France a present of a sack of potatoes. The King made a feast for his lords and nobles with the potato as the main dish. To His Excellency the King the dish of potatoes was first passed, then to the guests. The King tasted, said nothing but passed it on. Others did likewise. The silence was due to the fact, that though served with delicious mayonnaise, the potatoes were uncooked. The King was so disappointed that he commanded all the potatoes to be thrown outside the city. Fortunately soldiers soon camped near where the potatoes were dumped and the soldier boys discovered the appetizing baked potatoes in the ashes of the camp-fire.

The prejudice against this valuable food was slow in disappearing, but

Count Rumford did much to popularize it by using it in the nourishing soups he made for the poor in time of famine. It is said that at first he was compelled to smuggle in and keep hidden the potatoes he put in his soups.

During the terrible famine in Ireland in 1743 the potato again rendered valuable service by providing food for the starving people. Thus it gained the name of Irish. It is claimed that there has never been a serious famine in Ireland since that time.

Today the potato, of all vegetables, is most extensively used. This is due in part to its mild flavor of which one does not easily tire. For the same reason the potato lends itself to the production of many pleasing combinations with foods of more pronounced taste. It is wholesome and next to breadstuffs is our mainstay for starchy food. Indeed it may be advantageously used as a partial substitute for flour, in the production of many articles of food as, cake, bread, muffins, hot cakes, etc.

FOOD VALUE

The food value of the potato is due largely to its starch (carbohydrate) content, which, compared with other vegetables, is relatively high as it constitutes about 18 per cent of the potato. This starch produces heat to keep the body warm and energy to make the mechanism go. The power it generates is manifested in the varied activities of men and women, and of boys and girls. It is evident in work and play, at home, at school, on the farm and in the business world.

As to food value, perhaps next to starch, mineral matter is most important, because it helps to build bones, teeth, nerves and other tissues. The iron gives the red color to the blood and the potassium, which is present in comparatively large amounts, helps to keep the fluids of the body from becoming too acid, making them neutral or alkaline. The potato has enough protein (muscle builder) to be of value, but it contains only a trace of fat.

DEVELOPMENT OF THE POTATO INDUSTRY

With the purpose in mind of helping to increase the demand for potatoes and thereby aiding in the development of the potato industry in Coconino County, a letter was sent out to homemakers in this county making inquiry, first, as to the number of persons in the family; second, the number of pounds of potatoes used in one week, and third, a request for directions for preparing potatoes in four or more different ways. Following is a compilation of replies received:

First, the number of persons in families varied from two to eight,—average, three and eight-tenths.

Second, the smallest number of potatoes used in one week, by one

family, was two pounds for a family of three, and the largest, fifteen pounds for a family of two. The average amount of potatoes used by one person in one week was three and three-tenths pounds.

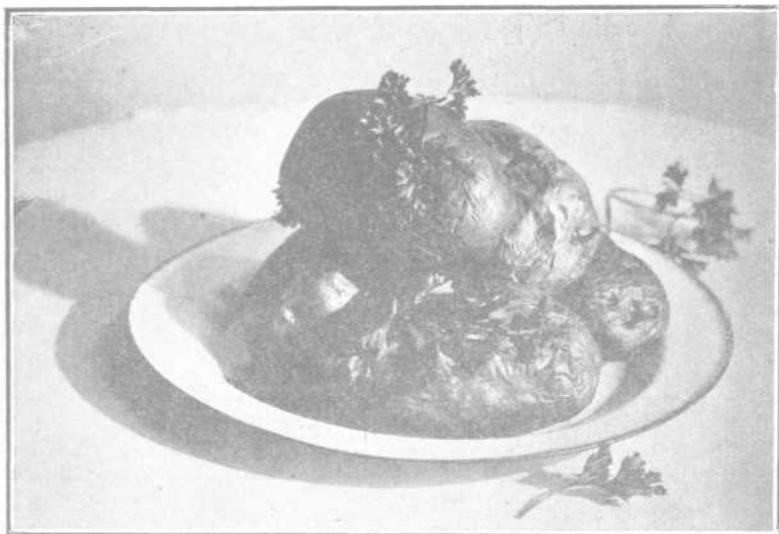
Third, thirty-one different ways of preparing potatoes for the table were reported, including baking, steaming, boiling and frying potatoes separately and in combination with other foods.

Some of these methods have evidently been devised by home-makers, while others have been obtained from co-workers and cookbooks. Following is a summary of suggestions and recipes received through these letters and gathered from experience and observation.

METHODS OF COOKING POTATOES

Old potatoes are improved by soaking two hours in cold water before peeling.

BAKED POTATOES



BLUE RIBBON, EARLY ROSE, BAKED POTATOES

If a potato is properly baked, none of the food value is lost, the best flavor is developed, and this food is more easily digested than if cooked in any other way. However, if the heat is not great enough to break down the cell walls of the potato, there results a soggy mass not easily digested. To let out the steam, the skin should be cracked as soon as the

potatoes are done. The same, or perhaps even better, results may be secured by inserting a fork on opposite sides of the potato when the outside has softened and the inside is still hard.

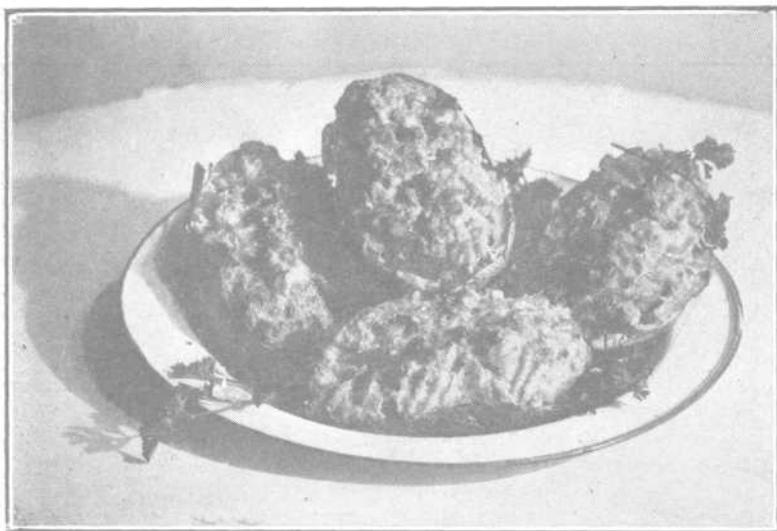
In letters received, directions for baking potatoes were given as follows: select potatoes of uniform size, scrub with brush, rub with fat, put in hot oven and bake until done.

VARIATIONS OF BAKED POTATOES

After baking potato, break open and insert a piece of cheese the size of a walnut.

Slit a large baked potato, hollow out a shallow cavity, and in it, break a whole egg. Return to oven and bake until egg is done.

The inside of a baked potato may be taken out, mashed, seasoned, and served at once, or after browning in a hot oven. Besides the seasoning



BLUE RIBBON, BROWN BEAUTIES, BAKED ON THE HALF-SHELL.

of salt, pepper and butter ordinarily used, such additions as cream, milk, cheese, bits of bacon or eggs, whole or in part, were suggested.

Baked or boiled potato that has been mashed may be made more light, fluffy and nutritious, by folding into it the beaten white of egg. When prepared in this way, the potato should be placed in a hot oven for a few minutes before serving.

Potatoes on the Half-Shell:—These are made by cutting medium sized

baked potatoes lengthwise, scooping out the inside, seasoning to taste as above indicated, returning to the shell, brushing over the top with egg or sprinkling with grated cheese and browning in a hot oven.

Franconia Potatoes —This is an excellent variation of baked potatoes, mentioned by a number of home-makers. Pared potatoes are parboiled, baked with roasting meat and basted with meat juices and fat. Sometimes the parboiled potatoes are roasted with pork chops or with meat drippings without the meat.

Ham au Gratin —Place a slice of ham in a baking pan, peel potatoes and place around the ham, cover with milk and bake slowly for forty-five minutes or until the potatoes are done and milk has evaporated leaving a light brown skin over all.

Scalloped Potatoes —Following are directions given by some of our correspondents for making this delicious dish: Pare and slice potatoes about one-fourth inch thick. Into a baking dish put a layer of these slices and sprinkle over it, salt, pepper and flour with a few pieces of butter. Put in other layers with seasoning until the dish is nearly full. Add milk until it may be seen above the slices. Bake in slow oven until the potatoes are done. One of the writers suggests varying this dish by the addition of cheese between the layers.

Chambray Potatoes —These are prepared as for scalloping except that no flour or milk is put in.

Scalloped Potatoes and Pork Chops.—Prepare potatoes as for scalloping. Put slice of onion in on first layer, cook on top of stove for fifteen minutes, season pork chops and place on top of potatoes. Put in oven and bake twenty minutes. No butter required.

STEAMED POTATOES

Next in food value to the baked potato with its jacket on is the steamed potato, even though cooked without its skin, for no appreciable amount of mineral matter or protein is lost in this cooking process. Nevertheless this method is not in as common use as others because it requires more time and effort.

Steamed potatoes are prepared as for boiling, put in a closed vessel having a perforated bottom, which is then put over a kettle of boiling water. The water must be kept boiling hard every moment. They will require from thirty to forty minutes to cook.

BOILED POTATOES

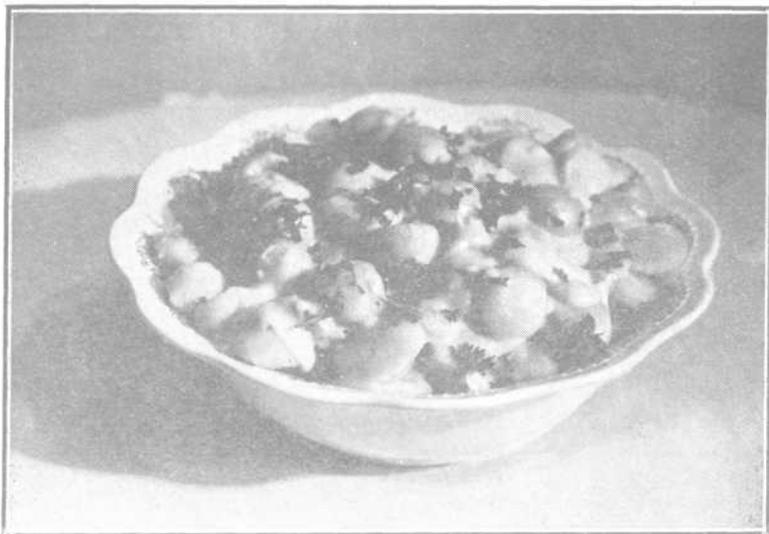
Boiling a potato is one of the simplest of cooking processes and few people realize how great is the waste of valuable food material due to improvident methods of boiling our most common vegetable. They do not appreciate the fact that the mineral matter the potato contains is

soluble in water and therefore a portion of it is lost if potatoes are boiled without their jackets.

The muscle building substance (protein), found in the potato, is similar to the white of an egg, and, like it, is soluble in cold water and hardened in boiling water. Therefore in order to retain this nutritious substance, put potatoes on to cook in boiling salted water. It is estimated that if potatoes are pared and soaked in cold water before cooking the amount of protein loss in one bushel is equivalent to that in one pound of sirloin steak.

Potatoes should boil steadily but slowly, as a considerable portion of the outside may be washed away by the rapidly boiling water before the inside of the potato is done. Some recommend overcoming this difficulty by adding a cup of cold water as soon as the outside of the potato is soft, thus driving the heat in to finish cooking the center and at the same time stopping further softening of the surface.

After draining the water from potatoes, which should be done as soon



CREAMED POTATOES

as they are cooked through, they should be returned to the stove and shaken as they dry. Thus they will become more mealy.

The substances extracted from pared potatoes by the water in which they are boiled may be advantageously used in soups, thus saving valuable food lost during the boiling process.

BOILED POTATO COMBINATIONS

A variety of appetizing dishes are prepared by combining sliced or diced boiled potatoes with creamed sauces, gravies or salad dressings, with the addition of other vegetables, cheese, eggs or meats. A number of these were mentioned in the letters. Directions for the preparation of some of these follow.

Creamed Potatoes—These are prepared in different ways. One of the simplest methods is to pour cream sauce over whole hot potatoes from which the water has been drained. Another method is to heat in cream sauce diced boiled potatoes or balls cut from boiled potatoes with a potato cutter. These dishes are improved by sprinkling over them finely chopped parsley. Their nutritive value and attractiveness may also be increased by the addition of green peas.

Potato au Gratin:—This is prepared by putting creamed potatoes into a baking dish, covering with buttered bread crumbs and baking until brown.

Delmonico Potatoes.—The above may be varied by alternating with the layers of creamed potatoes grated cheese, thus producing so-called Delmonico Potatoes.

Pittsburg Potatoes.—Another delicious variation of creamed potatoes may be prepared as follows:

- 2 cups diced potatoes (previously cooked),
- 2 cups thin white sauce well seasoned.

Place diced and seasoned potatoes in a baking dish. Pour the sauce over them and cover the top with

- $\frac{1}{4}$ lb. cooking cheese, grated or pressed through sieve,
- $\frac{1}{2}$ can red pimentoes cut into bits,
- $\frac{1}{2}$ cup buttered bread crumbs.

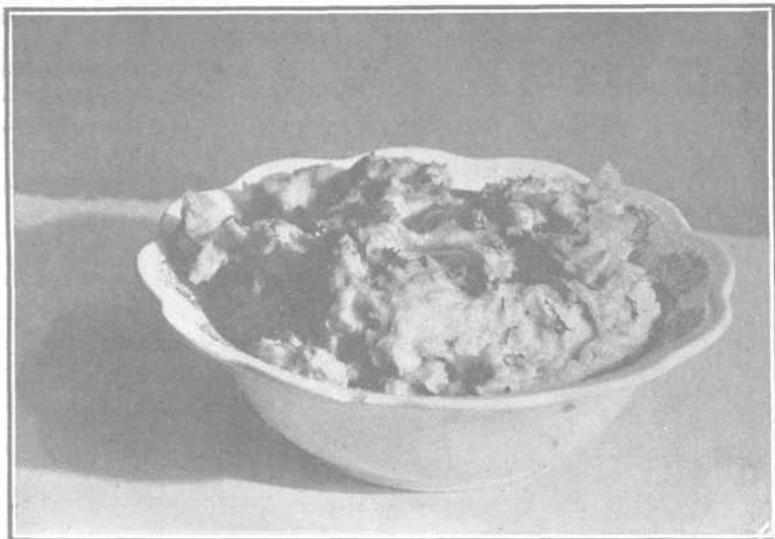
Use in order given. Place in moderate oven until the crumbs are nicely browned.

Potato Salad—The making of an excellent potato salad is not as easy as some seem to think. There are so many poor dishes served under this name that one is tempted to give them the old appellation of "sour cold potatoes."

This salad is usually made from boiled potatoes—but properly baked ones are even better for this purpose. The potatoes should be diced and over each layer, as cut, should be sprinkled salt, white pepper, celery salt and finely chopped onion or onion juice. To the cut and seasoned potato add a plentiful supply of good salad dressing, either boiled or mayonnaise, and mix with a fork being careful to break the dice as little as possible. Let the mass stand several hours in order that the dressing may permeate the potato. Most salads are best served very soon after they are made but potato salad is improved by standing. This salad may

be garnished with one or more of the following foods: Celery, parsley, cucumbers, radishes, slices of hard boiled eggs, etc. A number of these things may be put in the body of the salad as desired.

Mashed Potatoes:—Suggested recipe for seasoning mashed potatoes: 2 cups mashed potatoes (having been boiled in salted water), $\frac{1}{2}$ tsp. salt, $\frac{1}{8}$ tsp. pepper, 2 tbsp. butter, $\frac{1}{2}$ cup hot milk. As one of our home-makers puts it, "Everyone knows how to prepare mashed potatoes." Yet,



MASHED POTATOES

though this, of all potato dishes, is perhaps the favorite, one often meets with mashed potatoes unworthy the name.

To prepare this dish, the potatoes should be properly boiled, mashed and seasoned to taste, as indicated above. After adding the hot milk the mass should be beaten with a fork or egg beater until creamy. If one desires excellent results, the beating is a very important part of the procedure. For serving, pile the fluffy mass in a hot dish. Put a piece of butter the size of a walnut on top, and over all sprinkle a little finely chopped parsley. This dish should be served hot, as lightness is lost by standing.

Mashed potato is prized, not only for itself, but because from it may be made a great variety of dishes. Directions for the preparation of some of these follow:

Cottage Pie:—Line a baking dish with warm mashed potatoes, fill with

small carefully selected pieces of left over roast beef and nice brown gravy. Cover with mashed potatoes. Brown in hot oven.

Potato Cakes —These may be shaped from well seasoned warm mashed potatoes with or without the addition of egg yolk, rolled in flour, allowed to stand for an hour or more, then fried to a golden brown on both sides in a very little fat.

Potato Soups —Mashed, as well as other forms of potato, are extensively used in the making of soups. An excellent soup may be made from the following recipe (Miss Farmer's Cook Book):

“3 potatoes medium size	1½ tsp. salt
1 qt. milk	¼ tsp. celery salt
2 slices onion	⅛ tsp. white pepper
3 tbs. butter	Few grains cayenne
2 tbs. flour	1 tsp. chopped parsley

Cook potatoes in boiling salted water; when soft rub through strainer. Scald milk with onion, remove onion and add milk slowly to potatoes. Melt half the butter, add dry ingredients, stir until well mixed, then stir into boiling soup; cook one minute, strain, add remaining butter and sprinkle with parsley.”

Many mothers make milk gravy which the children enjoy. This can be easily transformed into a delicious soup by the addition of more milk, potato, a little scraped onion, celery salt and other seasoning according to taste.

One of our women suggests a soup made of potato with the addition of tomatoes, onion, macaroni, etc.

FRIED POTATOES

Of all cooked potatoes the fried varieties are least acceptable because they are most difficult of digestion. Therefore, these should not be given to children nor to adults who have digestive troubles. However, if people will have fried potatoes let them be so prepared that they will not be grease soaked as they often are. For example, if potato chips or French fried potatoes are made, care should be taken that the temperature of the fat is such as to cook the potatoes quickly without burning and that they be drained on unglazed paper as soon as taken out of the fat.

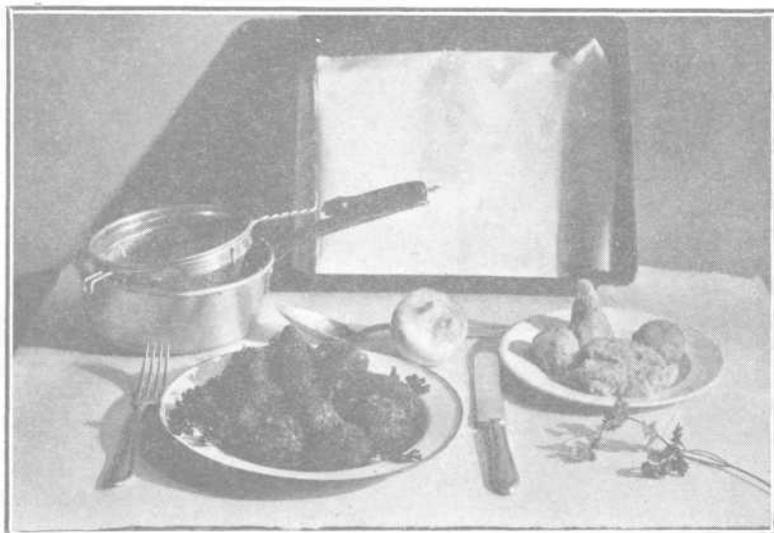
VARIATIONS

A number of the women mentioned frying potatoes both raw and boiled. Raw potatoes are sliced thin and fried with or without onions. They are more wholesome if only a small amount of fat is used, some water added, and the dish covered, thus partially steaming the potatoes.

One writer suggests dipping slices of raw potatoes in corn meal and frying them. Another suggestion is, “Put slices of bicor in kettle, add

onion, diced potatoes, salt, pepper, and cover with water. Cover closely and cook until done."

O'Brien Potatoes:—One of our home makers gave directions for preparing these as follows: "Fry three cups potato cubes, or balls, in deep fat, drain on brown paper and sprinkle with salt. Cook one slice of onion in one tablespoon and a half of butter three minutes; remove onion, and add to butter three canned pimentoes cut in small pieces. When thoroughly heated, add potatoes; stir until well mixed, turn into serving dish and sprinkle with finely chopped parsley.



CROQUETTES

Croquettes:—In letters received, these were mentioned. They are prepared by adding to well seasoned mashed potatoes, yolk of egg, onion juice and chopped parsley. The mass is well mixed and shaped into such forms as balls, pyramids, or cylinders. These are dipped into a mixture of milk and beaten egg, rolled in bread crumbs and fried in deep fat until brown, then drained on porous paper. The croquettes are less liable to break if allowed to stand an hour or more before frying.

Potato Apples and Pears:—These are shaped from a mixture like the above, except that the onion juice and parsley are left out, and that cream and sometimes a little nutmeg are added. They are fried in deep fat as described above. Whole cloves are used for blossom and stem ends.

POTATOES AS A PARTIAL SUBSTITUTE FOR FLOUR

A number of home-makers wrote of potato dumplings, rolls, pie, hot cakes, etc. The following recipes are given as illustrating this use of the potato:

Potato Rolls:—

"4 cups flour	2 medium sized potatoes
1 tsp. salt	(previously mashed)
1 tbs. sugar	Water or
7 tsp. baking powder	Milk

Sift dry ingredients, add mashed potatoes and liquid enough to mix dough. Divide into small pieces, knead each, and shape into small rolls. Place on a greased pan, brush with fat, stand in a warm place ten to twenty minutes. Bake in hot oven. When done, brush again with fat."

Potato Doughnuts:—

"1 cup sugar	1 tsp. salt
3 tbs. melted fat	1 cup mashed potato
2 eggs	4 tsp. baking powder
1 cup sweet milk	4 cups flour

Cream fat and mashed potatoes; add sugar, well beaten eggs and milk, add flour to roll out. Cut and fry in deep fat."

Limited space prevents the inclusion of all the good things given in the letters. Nevertheless, the cooperation of each individual is greatly appreciated and it is sincerely hoped that the cordial response will help many home makers to boost the

MILLION DOLLAR INDUSTRY
IN COCONINO COUNTY