grain are washed away by dilute alkaline solutions, and the remaining starch is converted into a powder. It is a wholesome and agreeable form of starch, but it should be used in combination with proteids and fats. It is rather more nutritious than rice, and can be cooked by the same methods as ground rice.

The young ears of maize are sometimes served as a vegetable during the autumn season.

The starchy food which should occupy the highest position in sick-room cookery is arrowroot. There is no article of commerce which varies so little in composition and so much in price as arrowroot. Bermuda arrowroot is sold at half-a-crown a pound, British arrowroot at fourpence, yet both are composed of nearly pure starch. Other varieties are sold at intermediate prices, but the composition is in every case the same.

Bermuda arrowroot is obtained from the rhizome, or underground stem, of the Maranta arundinacea, a plant belonging to the same family as the arum. It is a native of the West Indies, and grows freely in most tropical countries. The rhizome stores starch for the use of the plant, and when the plant is a year old the rhizomes are grated and washed in water. The starch sinks to the bottom, and is obtained by pouring off the water from the sediment and drying it by evaporation. The powder which remains is of a dull white colour, crackles when pressed, and retains the marks of the fingers. It has no flavour nor odour, and when made into a jelly it remains firm for three or four days. It is a heat-giving food, and contains no flesh-forming substance whatever. It is very easily digested, and is of such a bland and soothing character that it can be taken by invalids when all other forms of starch are rejected. It is useful as a diet in diarrhœa. It is suitable for dyspeptics, but should not be given as a food to young infants.

British arrowroot is less easy of digestion, and less delicate in flavour, but for ordinary culinary purposes it makes a cheap substitute for Bermuda arrowroot. It is obtained from a species of arum which was extensively cultivated at Portland.

Potato starch and sago meal are often sold as arrowroot, or they are used to adulterate genuine arrowroot. Adulterated arrowroot stiffens when it is first boiled, but gradually becomes thin and watery. The colour of adulterated arrowroot is a clearer white, and glistening particles can be distinguished. The odour is faintly that of potatoes, and the touch is soft.

Here are a few recipes for arrowroot :-

1. Invalid's Arrowroot Gruel.—Mix two teaspoonfuls of arrowroot with a little water. Let it stand an hour and then pour the water off. Boil half a pint of milk with two lumps of sugar, and pour the boiling milk on the arrowroot, stirring it until it forms a jelly-like mass.

2. Arrowroot Blancmange.—Mix a small teacupful of arrowroot into a smooth paste with a little cold milk. Boil a pint of milk with a strip of lemon peel, or a bay leaf, and sugar to taste, and when boiling pour it on the paste. Stir briskly, and then return it to the saucepan and allow it to boil for two or three minutes. Pour it into a wetted mould, and serve it with a fruit pure.

3. Arrowroot Pudding.—Mix two tablespoonfuls of arrowroot into a paste with cold water, and pour on it a pint and a-half of boiling milk, stirring well until mixed. Add 2 oz. of sugar, and set aside until nearly cold. Then add the beaten yolks of four eggs and 2 oz. of butter. Put the mixture in a greased pie-dish, with a little grated nutmeg and the crumbs of a penny sponge cake scattered over the surface, and bake it until it is hot through.

## En Electric Ibeating=pad.

## By J. C.,

## New York Hospital Graduate Class, 1903,

In hospitals, institutions, and homes supplied with electricity, an electric device is fast supplanting the hot-water bag, hot-water bottle, hot cloths, and other means of applying heat locally to the body. This device is in the shape of a pad, varying in size, and accordingly in price, which ranges from 6 dols to 13 dols. The purchase price practically covers the entire expense, as the cost of operating is triffing, and as, with care, the pad remains in good order. All that is necessary for the operation of the electrical heating-pads now on sale is an electrical current with a standard voltage up to 120 and a regulation fixture.

The pad itself consists of a spiral made of yards and yards of infinitely fine wire about a long and very narrow strip of asbestos. This spiral is, in turn, enveloped in asbestos, and, thus isolated, is stitched back and forth to the inside of a muslin bag. The pad, now in shape, goes into a waterproof covering, which protects the wire from perspiration from the patient's body. Then comes a wrapping of lamb's wool, which forms the outside of the pad.

The conductor-cord is supplied with a plug for connecting, through the lamp-socket, with either a direct or an alternating circuit; and with a switch, which is within easy reach of the patient. By means of this switch, the patient can easily regulate the current, which can maintain in the lamb's-wool covering a maximum temperature of 180°.

The infinite advantage of these electical heatingpads over more crude devices for applying heat in such cases as pleurisy, neuralgia and neurasthenia is evident. One has a soft, light, flexible pad, less than three-fourths of an inch thick, which can easily be applied to the site of pain and maintained there indefinitely, with little or no inconvenience to or disturbance of the patient.



