

sugar. Add at the last one teaspoonful white of egg or a little cream. If a pink sauce is desired, a little currant jelly or strawberry juice may also be beaten in with the butter and sugar.

To almost every housekeeper there comes soon or late the trying experience of finding unexpected guests at the door when the cupboard is almost bare.

In this emergency it is well to know that a delicious soup may be speedily achieved, using the accommodating white sauce for a foundation, and adding whatever may be on hand—canned tomatoes, peas, beans, celery, or asparagus stalks, or even cold mashed potatoes for seasoning.

Make the white sauce by the regular formula: one level tablespoon of butter, one level tablespoon of flour, one-half teaspoonful salt, one salt-spoon of pepper, and one cupful milk. Combine salt, pepper and flour. Have the butter melted in the saucepan, stir in the flour until smooth; then add the hot milk gradually, stirring for five minutes. Thin to consistency required, and add any pulp or seasoning desired. If celery or asparagus stalks are to be used, cook an hour or two and pass through a sieve. If only mashed potatoes is at hand, add a cupful to the butter and flour, before combining with the milk, and season with a little celery or parsley. If tomato add a pint of strained tomato to flour and butter, and thin with milk.

In giving a large luncheon one waitress is required for every six people. The crumbs are to be removed after the salad. It is considered ostentatious to set the table with more silver than is required for four courses. After that the silver may be brought in with each course. The dessert silver should be brought in with the finger-bowls.

EMMA PADDOCK TELFORD.

SCIENTIFIC MISCELLANY.

The venom of the toad and salamander is found by Dr. Hewlett to be a substance much like digitalin that is secreted by the skin, and, as this may have a favorable effect in dropsy of the heart, the ancient use of the toad for dropsy is less absurd than at first appears. The venom, being alkaloidal, is quite unlike that of snakes, which is of a proteid character. Only in comparatively large amounts is the venom fatal to the animal secreting it, and the salamander proves to be remarkably resistant to poison of all kinds, curare producing little effect and morphine none at all. Actual experiment has shown the blood and blood serum of the salamander to have an antitoxin effect toward curare.

An antidote for snake-poison from the bile of the venomous serpents is suggested by Dr. T. R. Fraser as likely to prove at least as effective as the most powerful antivenene. It was found that animals could take into the stomach without harm doses of venom that would kill 1,000 similar animals by injection into the veins, and investigation revealed the fact that the poison was counteracted by the bile. Especially powerful is the bile of the venomous serpents themselves, while that of the ox, rabbit and guinea pig has the anti-venomous property in slighter degree.

A commission of the Hamburg Senate reports that wrought iron pillars cannot withstand a heat of 600 degrees C., while concrete filling offers little advantage. The best protection was afforded by Gunzweig and Hartmann's cork composition or xylole encased in sheet iron substances that give out inflammable gases for two hours and a half, leaving a car-

bonaceous residue that steam from the fire hose does not destroy. A pillar thus coated gave way only after four hours of exposure to fire, while an uncoated pillar succumbed in seventeen minutes.

German trials have shown that a medium electric plowing apparatus may plow more than four acres to a depth of ten inches in ten hours, doing the work of four teams of six oxen at half the cost of steam plowing. Half a day is required for setting the poles and arranging the material. Any farm locomotive of twelve to fifteen horsepower can be used as a source of energy, and the fly-wheel of this is belted to that of the portable dynamo, the two conducting wires being arranged on poles along the edges of the field at right angles to the direction the plow is to follow. Two trolleys travel along these wires to take the current through wires parallel to the direction of plowing to the motor on the plow. These wires are kept stretched by tension carriages at the two ends, and rest upon two contacts carried by the plow on an arm that also serves to lift the carriages and arrange them at the proper distance for the return of the plow. The plow is double, being changed for the return by tilting so that the blades of the opposite end are put to work. The motor on the plow rotates a drum carrying a chain held by anchors at the two sides of the field, a simple lever arrangement enabling one man to shift the anchors for successive furrows.

Acid food, in the view of Dr. W. T. English of Pittsburg, is our latest excess, the acidulous habits of the body marking a distinct stage in civilization. The consumption of acid fruits, pickles and acid drinks is increasing at an astonishing rate, the production of tomatoes having multiplied ten times since 1890, while the quantity of acid drinks taken has doubled, in the same period, every year. The tendency of the acid diet is held to be to destroy the action of the bile and pancreatic juice by neutralizing their normal alkalinity, and to lessen resistance to infection by reducing the alkalinity of the blood and other bodily fluids. The effects may be far-reaching, deranging especially the nervous system and the heart and even temporarily causing intellectual confusion and incoherency of thought.

The largest land tortoise now living is supposed to be one lately acquired by the London Zoological society, this being about 4 feet 7 inches long, 2 feet 10 inches broad, and weighing about 500 pounds. It is a native of the Aldabra Islands in the Indian Ocean, but is said to have lived elsewhere for 150 years.

A definite idea of the present standing of alchemy in America is given by Dr. H. C. Bolton in the London Chemical News. Two claims to success in creating gold are deemed worthy of mention on account of the boldness, persistence and apparent scientific basis with which they have been urged. The claim of Dr. S. H. Emmens was first advanced in August, 1896, and in July of this year it was stated that nearly \$1,000 worth of an alloy of gold and silver, which had been produced from Mexican dollars, had been sold to the United States assay office, the profit on such manufacture being at least \$3 per ounce. It was predicted that the production would reach 50,000 ounces within a year. Dr. Emmens affirms that his work had its origin in an investigation of nickel-steel in 1892, when evidence of a new substance appeared, and, acting on a suggestion from Mr. Carey Lea's work on the allo-tropic forms of silver, he made a more minute subdivision of silver than Mr. Lea obtained, and compressed this in a new apparatus of great power.

The result is, a substance—called Argentaurum—with greater density than silver, and the appearance and properties of ordinary gold. The chief source of expense, in the words of Dr. Emmens, "is the time required for bringing about the desired molecular changes." The second process of transmutation is claimed by Mr. Edward C. Brice of Chicago, whose operations seem to have been begun in New York about three years ago, and to have continued with numerous victims—although his Chicago plant is still declared a financial success. A patent was applied for last May, and twice refused. The application being pressed, an elaborate test of the process was made by the patent office, with no result except partially to recover the small percentage of gold contained in commercial antimony.

A mixture of ninety per cent of lime, five of rosni and five of calcium carbide is claimed by an Italian, H. de Fazi, to be better and more economical than calcium carbide for producing gas. No special burner is required, and there is no fear of explosion from mixture with air.

A pen carrying a small electric lamp to prevent shadows when writing has been patented in Germany.

SUNDAY SCHOOL CONFERENCE.

St. Johns, Ariz., Sept. 2, 1897.

The conference of the Sunday schools of this Stake was held in Springerville, Ariz., Aug. 21 and 22, 1897. Stake Supt. J. W. Brown presided. The reports given by the superintendents of each ward Sunday school of the Stake (or his representative) showed a great work being done by the Sunday school organizations here. All the wards, except two, were reported.

General Superintendent of Church Schools Karl G. Maeser was present and gave instruction and advice upon the great Sunday school work. Elder Maeser's visits here are looked forward to with great anticipation for a spiritual feast, and we are always well pleased with them; our expectations never fail us, for he is always ready with good advice and instruction. The Sunday school organizations here were greatly benefited by his visit.

A good spirit prevailed at the conference, and all seemed interested in the good work of the Sunday schools.

JAMES W. LESUEUR,
Stake Secretary of Sunday Schools.

ADDRESSES IN CALIFORNIA.

915 Golden Gate Avenue,
San Francisco, Calif.,

August 22, 1897.

In view of the fact that so many are visiting this state as the time rolls on, from Utah, many of whom desire to see some of the Elders who are laboring here; also as many of the people of Utah have friends in this state whom they would like to have the Elders visit, letters of introduction can reach the Elders through this office in any part of the state, in any of the following counties, Sacramento, San Joaquin, Santa Cruz, San Benito, San Bernardino, San Luis Obispo, San Mateo, Santa Clara, San Diego, Riverside, Monterey, Mendocino, Eldorado, Alameda, Calaveras, Napa, Ventura, Santa Barbara, Orange, Los Angeles, and San Francisco. In each of these counties there are traveling Elders and we will gladly forward to them letters of introduction from friends in Utah.

E. W. Nye.

Last Wednesday H. P. Deskins, an old freight teamster, fell from a wagon seat near Forest Ranch, Cal., receiving internal injuries from which he died Friday morning.