

lies in inflammations of the skin, etc., was fortunate to discover that a saline lotion, or saturated solution of the bicarbonate of soda in either plain water or camphorette water, if applied speedily, or as soon as possible, to a burned or scalded part, was most effectual in immediately relieving the acute burning pain and, when the burn was only superficial or not severe, removing all pain in the course of a very short time; having also the very great advantage of cleanliness and, if applied at once, of preventing the usual consequences—a painful blistering of the skin, separation of the epidermis, and perhaps more or less of suppuration.

For this purpose all that is necessary is to cut a piece of lint or old soft rag or even blotting paper of a size sufficient to cover the burned or scalded parts, and to keep it constantly well wetted with the soda lotion so as to prevent its drying. By this means it usually happens that all pain ceases in from a quarter to half-an-hour, or even in much less time.

When the main part of a limb, such as the hand and forearm or the foot and leg, has been burned, it is best, when practicable, to plunge the part at once into a jug or pail or other convenient vessel filled with the soda lotion, and keep it there until the pain subsides; or the limb may be swathed or encircled with a surgeon's cotton bandage previously soaked in the saturated solution and kept constantly wetted with it, the relief being usually immediate, provided the solution be saturated and cold.

What is now usually sold as bicarbonate of soda is what I have commonly used and recommended; although this is well-known to vary much in quality, according to where it is manufactured—but it will be found to answer the purpose, although probably Howard's is most to be depended on, the common carbonate being too caustic. It is believed that a large proportion of medical practitioners are still unaware of the remarkable qualities of this easily applied remedy which recommends itself for obvious reasons.

A BROKEN-HEARTED BIRD.

A correspondent thus writes—"Nearly twenty years ago I owned a pair of beautiful canaries—the male being a very fine fellow, with a rich muslin note. Having furnished them with the outside rough form of a nest in straw, leaving them to complete its comforts with bits of soft wool, down and small feathers, they were shortly in the happy possession of four eggs. In due course four young ones presented themselves, to the evident delight of the parents, who fed them from daylight to dark, their favourite food being the yolk of hard-boiled eggs. Time brought round the period when, instead of raw, naked, helpless creatures always "asking for more," four full-fledged young birds frisked about the cage like so many pretty yellow balls of fine soft wool. They grew to be very fine birds, and first one friend and then another coveted them, until all had gone but one little youngling, which remained as the only solace of the parents. This last of the family was the delight of their hearts; they fondled it and played with it as we have seen an affectionate mother do with her child, and seemed to exert themselves to amuse it in every way their fancy prompted.

Probably a happier little family never existed. But, alas! the spoiler came. Another friend coveted the last of the little flock and it was taken away. And from that moment the joyous song of the male bird gave place to a painfully feeble little chirp. He sat on the perch with a drooping, heart-broken, spiritless aspect; his wings hung down as if all power and vitality had

time of his bereavement he fell dead from the perch. The affectionate creature had evidently died of grief for the loss of his "one ewe lamb." The cage was given away, with the remaining bird; and no inducement could tempt me again to run the risk of perhaps unconsciously being the cause of so much unhappiness and misery.

A YEAR'S WOOING.

'Twas autumn when first they stood on the bridge,
Ripe pears on the pear tree, ripe corn on the ridge,
The swallows flew swiftly far up in the blue,
And speeding still southward, were lost to the view.
Said he: "Can you love me, as I can love you?"
She said, quite demurely: "Already I do!"

'Twas winter when next they met on the bridge,
The pear trees were brown, and white was the ridge;
The swallows were feathering their nests in Algiers.
She looked in his face, and she burst into tears!
His nose it was pinched, and his lips they were blue.
She said: "I can't love you!" Said he: "Nor I you!"

'Twas spring-time when next they stood on the bridge,
And white was the pear tree and green was the ridge,
The swallows had thoughts of a speedy return,
And the midges were dancing a-down the brown burn.
He said: "Pretty maiden, let by-gones go by—
Can you love me again?" She said: "I can try."

'Twas summer when next they stood on the bridge,
There were pears on the pear tree, tall corn on the ridge;
The swallows wheeled round them, far up in the blue,
Then swooped down and snapped up a midgelet or two.
Said he: "Lest some trifle should come in the way,
And part us again, will you mention the day?"
She stood, looking down on the fast-flowing rill,
Then answered, demurely: "As soon as you will!"

—Chambers's Journal.

BAKING BREAD.

I think there are comparatively few who realize how very important it is that the oven should be of just a proper heat when the bread is first put in. An experienced baker once told me that of all the conditions necessary to good bread none was of more importance than the temperature of the oven. Bread and rolls raised with yeast do not require so great a heat as if made with saleratus or baking-powder. No matter how much care has been given to the mixing of such bread, if the oven is not sufficiently hot it will not be light. If there is any place where a thermometer is needed it is an oven, to guide the cook in the matter of getting a correct heat. But since we are not blessed with such a convenience each person must experiment for herself and adopt such plans for her guidance as she may think best. When making any kind of bread that must be immediately baked, the oven should be heated before mixing the dough, so that the instant it is ready it can be put in. I never place the tin on which the bread is baked on the bottom of the oven, but it is elevated by a thin, open grate, which allows the hot air to pass under the tin, and the bottom of the bread is evenly baked and the danger of its burning is avoided.

HEART BEATS.

Dr. B. W. Richardson, of London, the noted physician, says he was recently able to convey a considerable amount of conviction to an intelligent scholar by a simple experiment. The scholar was singing the praises of the "ruddy bumper," and saying he could not get through the day without it, when Dr. Richardson said to him:—

"Will you be good enough to feel my pulse as I stand here?"

He did so. I said, "Count it carefully; what does it say?"

"Your pulse says seventy-four."

I then sat down in the chair and asked him to count it again. He did so, and said, "Your pulse has gone down to seventy."

I then lay down on the lounge, and said:—

"Will you take it again?"

He replied, "Why, it is only sixty-four; what

I then said, "When you lie down at night, that is the way nature gives your heart rest. You know nothing about it, but that beating organ is resting to that extent; and if you reckon it up it is a great deal of rest, because in lying down the heart is doing ten strokes less a minute. Multiply that by sixty, and it is 600; multiply it by eight hours, and within a fraction it is 5,000 strokes different; and as the heart is throwing six ounces of blood at every stroke, it makes a difference of 30,000 ounces of lifting during the night. When I lie down at night without any alcohol, that is the rest my heart gets. But when you take your wine or grog you do not allow that rest, for the influence of alcohol is to increase the number of strokes, and instead of getting this rest you put on something like 15,000 extra strokes, and the result is you rise up very seedy and unfit for the next day's work till you have taken a little more of the "ruddy bumper," which you say is the soul of man below."

A MATHEMATICAL GENIUS.

The Philadelphia *Enquirer* tells an interesting story of a man in Pennsylvania, named Samuel Duncan, who performs wonderful feats in figures. He lays no claim to learning, yet college students go to him for assistance when they get beyond their depth in mathematics. The following is a problem that baffled the ability of all the students of the University of Pennsylvania, which Mr. Duncan solved in forty minutes:—

Take a room forty feet long and thirteen feet wide, what is the longest piece of carpet one yard wide that can be laid on it without cutting? The answer is 42.06, but there is no known rule of algebra by which it can be determined. He has been offered by a student \$25 for the process of solution.

Another, and one requiring more time and figures in its solution, is this:—

A pole is sixty feet high, at the top it is seven inches in diameter, and at the base ten inches; given that 720 coils of rope are wound around the pole, how far will a man walk in unwinding it? The answer given by Mr. Duncan is 360 miles. It is said that he can perform two different problems at the same time, one with his right hand and the other with his left. These problems may be interesting for some of our students to think about.

THE PROPER WEIGHT OF MAN.

Professor Huxley gives the following table of what a full grown man should weigh, and how this weight should be divided:—Weight, 154 pounds, made up thus: Muscles and their appurtenances, sixty-eight pounds; skeleton, twenty-four pounds; skin, ten and one-half pounds; fat, twenty-eight pounds; brain, three pounds; thoracic viscera, three and one-half pounds; abdominal viscera, eleven pounds; blood which would drain from body, seven pounds. This man ought to consume per diem. Lean beefsteak, 5,000 grains; bread, 6,000 grains; milk, 7,000 grains; potatoes, 3,000 grains; butter, 600 grains; water, 22,900 grains. His heart should beat seventy-five times a minute, and he should breathe fifteen times a minute. In twenty-four hours he would vitiate 1,750 cubic feet of pure air to the extent of one per cent; a man, therefore, of the weight mentioned ought to have 800 cubic feet of well-ventilated space. He would throw off by the skin eighteen ounces of water, 800 grains of solid matter, and 400 grains of carbonic acid every twenty-four hours, and his total loss during the twenty-four hours would be six pounds of water and a little over two pounds of other matter.