and when I visit him next day I find all the acute symptoms gone; no distress, pulse and temperature normal, and the patient comfortable, but weak. On inquiry, he declares, in nineteen cases out of twenty, that the relief was obtained after the second dose of the medicine, that is, within four or six hours after the commencement of the treatment. Let me instance two cases as typical examples of many others.

Case 1.—Mr. T—— is extremely ill, and believes himself to be dying; pulse 117, with the other acute symptoms mentioned. I venture to assure him that he will be nearly well to-morrow. Next day I find him quite relieved, and the pulse reduced to 61.

Case 2.—A. F——, a young married woman, was taken very suddenly ill, and when I first saw her she was raving and could not be made conscious of my presence. The next morning she was well, but weak, and I was assured that the second dose of the medicine marked the time of the amendment. On the third day she was quite well, dressed, out of bed, and attending to her duties in the house.

But I have not yet stated the exact nature of my *modus operandi*. Very important results can be obtained through very simple means. In the days of Sir Thomas Watson, the most intelligent answer to the question, "What is the best cure for acute rheumatism?" would be, "Six weeks in blankets, aided by drugs administered on general principles." But the salicylate of soda has changed all that, and has given us a short cut toward getting rid of the excruciating tortures of acute arthritic inflammation of a rheumatic nature; and so with other affections. Having regard to the essential state of a severe attack of influenza, I conceived that I would get the most effective antagonism in greatly increased alkalinity, and the *bicarbonate of potash* was the first agent that I thought of. This salt has many advantages. It is not unduly stable, to make it difficult to break up in the system. It is also readily eliminated, and thus soon leaves the system; so that the danger of potash poisoning is reduced to infinitesimal proportions. Having found this salt to answer all my purposes, I have not looked for another, although, according to my theory, other remedies of a similar nature might easily give like results. I give liberal doses (thirty grains) in a teacupful of milk every two or three hours. I add a few drops of the tincture of capsicum, but this is not at all essential.

A word or two of caution. In two or three cases the action of the heart was weakened to an unpleasant degree; but digitalis and the aromatic spirit of ammonia quickly restored normality. Diarrhœa also sometimes supervenes, but is effectually met by Dover's powder. In cases where weakness was induced by previous disease, or where some other disease was a concomitant, or where pregnancy existed, the action of the remedy was somewhat retarded, but not rendered by any means less certain. Where the salt was intermitted too soon, the symptoms returned; but they readily gave way again on the resumption of the treatment. I trust that those who have the opportunity will test the accuracy of my statements by careful clinical observations, as I feel confident they will obtain equally favorable results; for the remedy acts uniformly and satisfactorily; *tuto, cito, et jucunde.*

SUCCESS THE RESULT OF KNOWLEDGE.

In his 5th chapter on Hints to Engineers (published in the *Scientific Machinist*) Mr. Edwin Woodward says:

In no practice is it more eminently true than in steam engineering, that success is the result of knowledge. Knowledge is the outgrowth of study and practice, and while study must inevitably result in knowledge, if rightly directed, such may not be said of practice without the same qualification, paradoxical as it may seem; for though it is usually said that practice and experience are the parents of knowledge, they are often seen united with no more creditable progeny than ignorance or pomposity. So it naturally behooves the enterprising learner to bribe the keeper of the Storehouse of Success for unlimited stores of his choicest supplies.

The mechanical paper is the most direct avenue; seek its aid. Success often seems to be the result of a happy combination of circumstances, usually termed luck, and when one is fortunate in that way, he is usually envied. But such fortune, if received uninterruptedly for any considerable space of time is usually more destructive than misfortune, for it renders the recipient reckless of chances, and always ready to trust to "his luck," which will sometimes turn and end in ruin, perhaps, for the "lucky" man, and perhaps disaster and hardship to others.

It is prudent to study the conditions under which the boiler performs its functions. If it is a plain cylinder boiler properly set, the tubes and sheets kept clean, there is no place in it in which the water is not in a constant state of ebullition, which is attendant on the process of making steam. But directly over the grates where the heat of the fire is greatest, the ebullition is most intense, and as a natural result any sediment or foreign matter held in solution in the water will boil up fiercer there and pass out to a cooler and less agitated portion of the water, and then will settle upon the tubes, sheets or stay bolts. And since the ebullition of the water at such places is not sufficiently active to keep the sediment in motion when once settled and burned fast, it is there to stay; and, unless removed by mechanical means, it will thenceforth rapidly accumulate, the coating rendering the fire more ineffective with every additional supply, till eventually the space is thoroughly full and the water will not boil any. The thickening scale and slush prevents the water keeping the tubes or sheet from overheating and they soon begin to burn and scale rapidly, and almost before the defect in the steaming capacity of the boiler is detected the boiler is blistered or burned, the tube sheet twisted and the tubes warped and sprung.

Any boiler maker will affirm that this is no fancy, but a fact of every day occurrence, and it shows the need of having the interior of every boiler made easily accessible for the purpose of keeping it clean. In large boilers the man-hole gives ingress but in small ones other means must be devised.

Of ordinary types of boilers, the water leg in the upright or vertical, as they are indifferently termed, and the locomotive styles are usually the most liable to excessive deposits. The writer has seen the water spaces beneath and between the tubes at the rear end of the latter style of boilers completely filled from the