

**For the Scientific American.
New York Salt Works.**

In the centre of the Empire State, there is a mine of wealth in her subterranean salt springs. The manufacture of salt in this State has been the means of reducing its value throughout the United States. The Salt Works are situated near Syracuse, which, in 1820, consisted of one house in a swamp, is now a fine city, containing upwards of 15,000 inhabitants. It owes its prosperity to its advantageous situation and its salt works. Its salt manufacture has added vastly to its rapid growth in wealth and population. During the past few years the annual manufacture of salt has been from two and a half to three and a half millions of bushels. Three bores have been made into the earth to the depth of two hundred feet, the salt water is forced up by steam and water power into a building sixty feet above the level. It is then sent through pipes and bored logs to the different factories. The works extend five miles. It is manufactured in two ways, by evaporation and boiling. By the first method, the salt water is poured upon a broad surface 12 feet square and 6 inches deep, and thus exposed to the heat of the sun. Sliding roofs are prepared for all the evaporating works, by means of which the salt water is covered in wet weather. In dry seasons the vats "dry off" twice. The salt that remains is of the best quality. The particles are coarse and beautifully crystallized. The evaporating works cover a very large area, and from a distant spot they very much resemble a broad lake. But the greatest quantity of salt is made by boiling. There are from twelve to twenty large kettles in each building. They are kept constantly full of salt water, and a large fire is constantly burning underneath. The workmen under an intense heat, are employed in scooping the salt from the kettles. After a little draining it is ready for market. Hundreds and thousands of barrels of this salt are packed weekly and sent to distant places.—The State enacted a law a few years ago, awarding premiums for all the salt shipped to tide water,—out of the State. This increased the produce and we believe for the general benefit of the State. The salt springs are not confined to the immediate locality of Syracuse, but extend to the East of Salina and to the West of Montezuma swamp. It is only around Syracuse, however, where the springs can be worked profitably.

At Liverpool, a short distance from Syracuse, a new salt spring, yielding a good article of brine, has recently been put in connexion with the old salt works. It is 100 feet deep, and is worked to the entire satisfaction of all the manufacturers.

Another is now in process of being dug a few rods west of the old Syracuse spring.—The pipe, seven-inch bore, has been sunk to the depth of 313 feet, with every prospect of finding an abundant supply of brine equal to other springs. This will soon be put in operation, which will make the number of springs from which brine is obtained for the manufacture of salt in that city and vicinity, as follows:—

Two at Liverpool, three at Salina, and three at Syracuse.

The seven springs in operation now, it is estimated will furnish 1,000,000 gallons of water in twenty-four hours, which will be increased by the new spring to nearly 2,000,000 gallons.

The salt business, is rapidly increasing.—The aggregate amount of salt manufactured between the first of January and middle of August last year was 1,673,894 bushels; and during the same period of time this year 2,062,134 bushels, showing an increase of 388,240 bushels. A ready market is found for all that can be manufactured and the demand for it increases as its good qualities become known.

The Poor of England.

From Parliamentary returns for 1847, it appears that the total number relieved during the year was one million seven hundred and twenty one thousand. Of this great number 500,000 were able bodied and could not get work. It is proposed in Parliament to lay out land in every parish to employ the poor who are able to work, in cases of being thrown out of employment. A good measure.

American Indian Corn.

After last year, there can be no doubt but more Indian corn will hereafter be exported from this country to Britain than ever before. Formerly as an article of export it was almost unknown. The people of England did not relish it, and were strongly prejudiced against it, from the fact, that in the scarcity of 1813, the corn sent to England was all heated and moulded and the people looked upon it as by nature musty. Last year by the process of Kiln drying, corn received in England was as sweet as when shipped in our harbours, therefore we may expect, that to dry our corn well, we will always have a market for it. But this preserving process must not be neglected.

The Philadelphia Ledger states that "at 25 cents the bushel for Corn at New Orleans, farmers generally in the valley of the Mississippi would be remunerated, and those immediately on that great river would make more money than by cotton at 6 cents. At 40 cents, the profit becomes important to the corn grower on the Ohio and its tributaries, the Cumberland and Wabash, while at 45 or 50 cents vast supplies would be drawn from a thousand different sources. The margin for shipping profit would be ample in either case, with a steady demand in Europe, unless, as it sometimes happens at New Orleans, freights should run up to an unreasonable figure. The capacity of the West for the production of this grain is incalculable. Soon after the subject first excited attention in England, the question was asked by an officer of the British government how much Indian corn the West could spare to his country. The reply was, "send your order to any single State bordering on the Mississippi, and you will get all you want." Tennessee alone produces about eighty millions bushels.

America is the Grainary of the world and her agricultural products are the source of England's wealth. In her cotton fields she holds the keys of England's power and in her corn fields who cannot behold a source of supply to render her the feeding as well as the clothing provider for her mother land.

Sumac.

This is a stringent shrub used for the purposes of tanning and dyeing. The best quality comes from the Island of Sicily and costs the United States no small amount yearly, as great quantities are used for the purposes mentioned. The plant or shrub, is a native of America and we do not see why it might not be cultivated both successfully and profitably, especially in some of our Southern States. It grows best in warm sandy soil. It requires a few years after planting to produce full crops—stands 10 or 12 years after planting until it requires new planting, hence a regular series of planting is easily kept up. It requires very little labour to prepare the land or cultivate the crop—can be gathered in by any sort of hands—crop steady and sure. It is prepared for market by grinding leaves, &c. at small cost.

Domestic Architecture.

There are those who are mourning over decline and full of splendid architecture,—who are continually grumbling at the want of modern genius in the erection of buildings. But although the ancients surpass the moderns in the splendour of design—the beauty of form and the harmony of parts—yet we far surpass them in the more essential parts,—comfort and convenience. This is especially true in regard to the dwellings of the working classes. All the ancient gorgeous temples and glittering palaces were the contrast to miserable hovels, fit only for beasts of burden. A better day has now dawned upon the world, and as evidence of the reform in the condition of the working classes, we have the finest demonstration in the houses which are now being built, or rather the comfortable houses in which they now reside, in comparison with the wretched abodes which in the past ages were the dwellings of the labouring classes. There are great improvements yet to be made, science aided by the important consideration, "that the working men are now something" will yet cause a greater advance in this all important constituent of human happiness.

The best way to make Butter.

Mr. Bement of Albany, N. Y., a practical farmer and Editor of the Journal of Agricultural Science, says that the best way to make the greatest quantity and the best butter, is to strain the milk as soon as milked and keep it in a temperature airy and dry of about 55 or 60 degrees and churn at that heat—never much below nor above. The greatest quantity of cream and butter which Mr. Bement ever obtained from the least quantity of milk was treated as follows.

The pan into which the milk was strained, was four inches deep and flaring. Another made six inches deep and nearly straight in the sides and just large enough at the top to receive and embrace the upper pan, within half an inch of the top, and it should fit tight, so that little if any of the steam will escape. A small tube was soldered near the top of the under pan for the admission of hot water, and a small hole was made on the opposite side for the escape of the air while pouring in the hot water. The first made was soldered together at the top, but was found difficult to wash and dry; being separate, they can be washed and dried without difficulty.

The milk was strained into the upper pan and left at rest for 12 hours; then the same quantity of boiling water was introduced into the under pan and suffered to stand 12 hours longer, when the cream was found perfectly separated and of such consistence that the whole might be lifted off by the finger and thumb.

The cream was churned immediately after skimming at a temperature of 55°. In this manner first quality of rich yellow butter was obtained in 15 minutes, in the month of March. Under the ordinary treatment, much less butter would have been obtained, and of a white color, insipid, without flavour and unfit for table.

The proper degree of heat for churning is most beautifully regulated by Crowell's Thermometer Churn—a very fine yankee invention of the old Commonwealth and highly spoken of. It consists in having a separate chamber for hot water, or cold, as may be needed to bring the cream to its proper churning degree regulated by a thermometer,—an infallible test.

Energy and Mind.

Energy is every thing. How mean a thing is man with little motive power! All the abilities nature has given him lie useless, like a great and mighty machine, ready at every point for useful action, but not a wheel turns for want of a starting power. A great man is like a great machine. He has a great power to set in motion the various and immense projects which he has in hand; little motives can neither start nor stay him, they may set in motion the powers of an ordinary man, and render him a respectable man, even a beautiful piece of mechanism, but never a magnificent one.

Yet there is one thing which renders man supremely above the machine. By the working of his own mind he can improve and exalt himself; by directing his eye to what is great and good, he may become so. If then we become what we wish to be, what high objects should we aim at and what resolute and energetic efforts should we ever be making to attain them!

The Fakeers of India.

Each one of these beings seemed to be more revolting than the last. They are, for the most part, young men, and their life is one of ease and good cheer; for, in every place their impudence procures them money. Their raiment, when, indeed, they have any, is a cloak of orange color; their face is smeared over, as is the whole body, with ashes, which gives them a horribly cadaverous hue; their hair, long and dishevelled, is either dyed a pale reddish brown, or covered with a wig formed of tufts of camel's hair, and powdered with ashes; not unfrequently moreover, they put on the top of this, by way of an additional head-dress, their iron pot or stewpan! Many among them carry a sort of guitar with wire chords, or a hand drum. They invariably act the part of tyrants towards the poor; often have I seen them busily inspecting the baskets of the heavy laden bearers, and appropriating to themselves their victuals.—*Cor.*

Preserving Newspapers.

One of the many things which I have to regret, says a correspondent of the British Banner, when I review my past life, is that I did not, from earliest youth, at least as soon as I was able to do it, take and preserve some good newspaper. How interesting would it be now to a sexagenarian to look into the papers which he read when he was twelve of sixteen, or twenty years old! How many events would this call to mind which he has entirely forgotten! How many interesting associations and feelings would it revive!—What a view would it give of past years!—What knowledge would it preserve by assisting the memory! And how many valuable purposes of a literary kind, even, might it be rendered subservient to!

How much do I wish that I could look into such a record when composing this short article! But newspapers are quite different things now from what they were sixty, or even twenty years ago. They are unspeakably more interesting and valuable; in this respect, at least, (I believe in many others,) these times are better than the former. Formerly the editors of newspapers were obliged to strain their wits and exhaust their means in order to obtain matter to fill their pages—Now the great difficulty is, to insert all the valuable interesting materials that are poured upon them from every part of the world, and from every grade and phase of society. Now, newspapers contain many of the best thoughts of the most highly gifted men, on the most momentous subjects, and their reports of current events are among the most reliable, and will furnish an inexhaustible fund of entertainment to the end of life.

Taking a Shower Bath.

Doctor.—Well, how did your wife manage her shower bath, deacon? Deacon.—She had real good luck. Madame Mood told her how she managed. She said she had a large, oiled silk cap, with a cape to it, like a fireman's that came all over her shoulders, and— Doctor.—She's a fool for her pains—that's not the way. Deacon.—So my wife tho't. Doctor.—Your wife did nothing of the sort, I hope. Deacon.—Oh, no, doctor, she used an umbrilly. Doctor.—What, used an umbrella, what the mischief good did the shower bath do her? Deacon.—She said she felt better. Her clothing did not get wet a mite. She got under the umbrilly for half an hour, till all the water had trickled off, and said 'twas cool and delightful, and just like a leetle shower bath in summer. Then she took off her things; and rubbed herself for half an hour after.

Jokes.

A joke may change the most resolute will of the most ferocious tyrant. All know how despotic and ferocious was Henry VIII., of England. He, having some motives for discontent with Francis I., of France, sent to him, as Ambassador, an English Bishop, whom he wished to charge with a message full of gall, pride and menace. This prelate, perceiving all the peril of his mission, sought to excuse himself. Fear nothing, said Henry to him, since if the King of France should take your life, I will cut off the heads of as many Frenchmen as I can lay my hands on. True, replied the Bishop, but among all those heads there would not be one that would fit my bust as well as the one which is there now! This jest made Henry laugh, and ended in causing him to change his resolution. Without this, perhaps England and France would have written the history of another war.

Make your Beds Young Ladies.

When you leave school take care of your chamber. It is a good plan to strip the clothes off your bed and make it up as soon as you rise from it; by doing it then you can protect your hair from lint and feathers, and being lightly clothed, your movements are perfectly free, and the glow occasioned by exercise makes you on a cold morning feel less dread of cold water. You can finish making your bed and dust your furniture after you are dressed; and before breakfast if there is time; but if not, return and do it as soon as possible after the meal is over.