

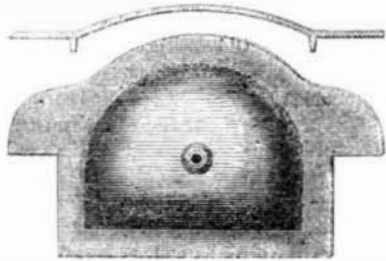
New Inventions.

Preserving Butter.

A patent has been secured by W. Clark, of London, for the following method of preserving butter:—The butter is first well beaten in the usual manner after churning, then placed between linen cloths and submitted to severe pressure for removing whey and water. It is now completely enveloped or covered with clean white paper, which is coated on both sides with a preparation of the white of eggs, in which 15 grains of salt is used for each egg. This prepared paper is first dried, then heated before a fire, or with a hot iron, just prior to wrapping it round the butter. It is stated that butter may be kept perfectly sweet without any salt for two months, when thus treated, if placed in a cool dry cellar. The submitting of butter to pressure, as described, is a good plan, and one which we recommend to all our farmers. They can easily practise it with a small cheese-press.

Floyd's Retort Covers.

The doors or covers of gas retorts have hitherto been made of cast iron, and have not only been heavy, but for want of homogeneity in the compactness of their structure, quickly wear out by oxydation, and sometimes break upon being dropped on the floor of the building in which the stack of retorts are placed.



Our illustration represents a retort cover made of malleable iron, only a quarter of an inch thick, and properly convexed, as shown in the sectional view, which gives great strength. The cover can be made of any shape, to suit various retorts, and it was patented as a new article of manufacture July 21, 1857, by the inventor, J. R. Floyd, who assigned the invention to Theodore C. Kibbe.

Any further information can be had by applying to the manufacturer, Silas C. Herring, 740, 742, and 744 Greenwich st., New York. It is durable, light, and economical.

Improved Shower Bath.

Refreshing to the weary, cooling to the excited, and healthy to all, is the shower bath, at once a thing of luxury and a saver of doctor's bills, and our illustration represents a happy arrangement of a portable shower bath that will place this useful piece of furniture within the reach of all.

Fig. 1 is a perspective view of the bath, the internal parts being shown as though the outer case were transparent, the actual bath, however, being constructed of sheet tin or other metal.

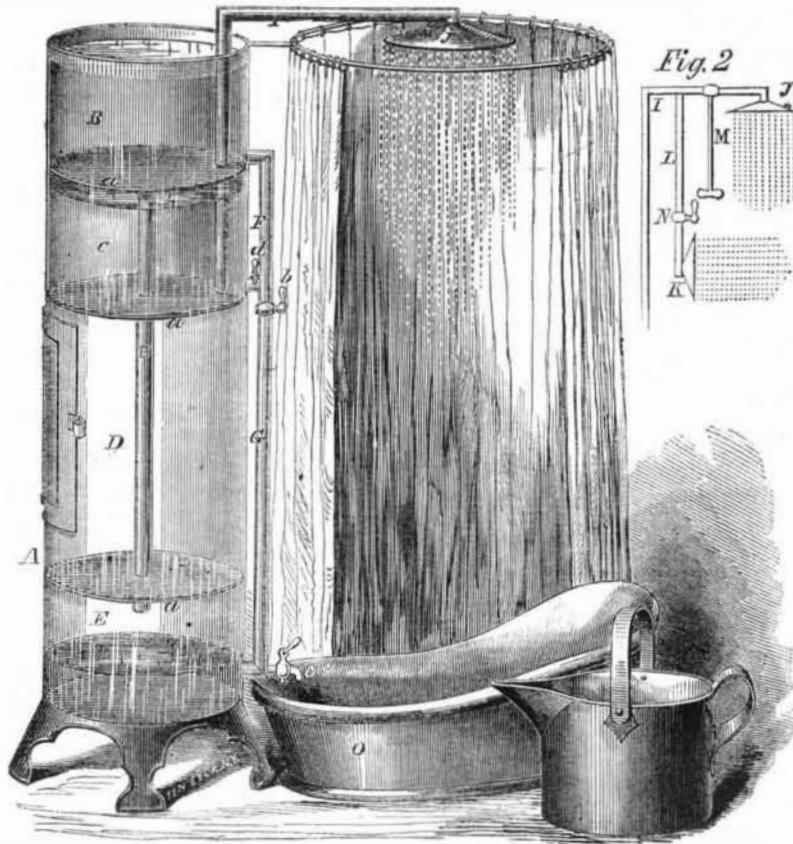
The bath is shaped like a pillar standing on an open bottom, and the pillar, A, is internally divided into four compartments, B C D E, the compartments being separated by floor, a. The chamber, B, communicates with chamber, B, by a pipe, F, in which there is a stop-cock, d, to open or close communication, and this pipe, F G, extends down to the lower chamber, E, so that when faucet, d, is closed communication is open between B and E. D forms a closet for soap, sponge, towels, &c., in which they can be kept out of the way, the chamber, E, communicates with C by an air pipe, H, and from the chamber, C, a pipe, I, passes through B, and ends in a rose, J. From the pillar, A, there extends a wire curtain ring from which the curtains are suspended to hang over and around the foot pan O, so as to entirely conceal the person taking the bath.

Fig. 2 shows an extra attachment to the pipe, I, by which a shower may be thrown from a rose, K, connected by a pipe, L, with I, on to the back or breast as desired. The stop-cocks, N and M, regulate the streams.

The operation is as follows:—Water is poured into the chamber, B, b being closed, and d opened, so that it finds its way into C,

until that chamber is nearly full. d is then closed, and water poured into B, again; now when a bath is required, b is opened, and the water in B, passes down E G into the lower chamber, the air from which passing up the pipe, H, presses on the surface of the water in C and forces it through I, and the rose, J, on to the person taking the bath. There is

MANSFIELD'S SHOWER BATH.

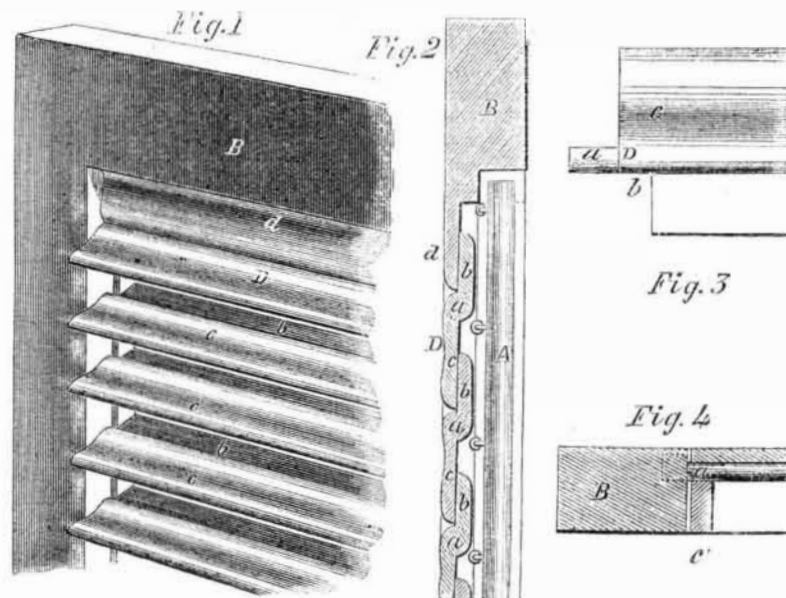


a faucet, c, in the compartment, E, for emptying it, and a screw tap in J for cleaning it should it get foul. This is one of the most economical and portable shower baths we have ever seen, and we heartily recommend it to our readers, as a valuable aid to that which we sometimes venture to advocate, namely, the improvement of the public

health. "Prevention is better than cure," says the trite old proverb, and those persons who daily use a shower bath escape many of "the ills that flesh is heir to."

It is the invention of Jos. Mansfield, of Jefferson, Wis., who will be happy to furnish any further information. It was patented Dec. 14, 1858.

KELLY & LIVINGSTON'S WINDOW BLIND.



To any one arriving as a stranger in this country from Britain, the green outside window blinds at once strike the attention, and should he have been a traveler, remind him forcibly of the sunnier portions of Europe, where the black smoke of bituminous coal has not clouded the atmosphere, and where the air is pure, exhilarating, and pleasant.

Of their convenience no one can entertain a doubt, and any invention which tends to make them more secure and weather-proof is to be regarded with attention. The subject of our engravings is such an improvement, the invention of D. Kelly and W. Livingston,

of Grand Rapids, Mich., which was patented February 10, 1857.

Fig. 1 is a perspective view of part of the blind, and Fig. 2 is a vertical section nearly through the center.

B is the frame, the top of which has a pendant, d, and a weather-strip inside, projecting down the sides against the slats, D, the backs of which, b, are cut away from the center, a, as shown in Fig. 3. The front part of the slats, c, when closed as seen in Fig. 2, project and fit in with the back, b, and form a front that is perfectly flush the one slat with the other, and perfectly closed against

the weather. This weather-strip is seen at C, Fig. 4, and the slats are operated by an inside piece, A; they turn upon a pivot, a, which is cut with the slat and forms part of it. The invention consists in hollowing out the back, b, so that the front, c, of the slat above it will overlap, and also providing the strip, C, against which the slats fall flush, and so prevent the ingress of rain and bad weather generally.

It is a good invention, and further information may be obtained from the inventor as above.

Soup and Pickles.

On page 256, Vol. XII, SCIENTIFIC AMERICAN, we furnished some excellent advice regarding soup-making to our cotemporary, *Life Illustrated*, but it seems to have been rather highly spiced for its delicate cold water digestion. Since that period—nearly two years—it has never forgotten us, but has kept watch and ward over our actions until it has found an opportunity to make a foray on a dish of our pickles. The following extract will show how our cotemporary's mind is exercised on this most momentous question:—

"Science should be authority," says our cotemporary. "We bow to the teachings of science. But, sometimes, we think that the dignitary officiating as science has a mote in his eye. The SCIENTIFIC AMERICAN directs to boil beets three parts done, and then put them, cut in slices, into vinegar in which have been steeped allspice, ginger, salt, black pepper, and cayenne. After they are kept thus a month, he begs an invitation to help eat them with bread and cheese! Is this process scientific? Is it a healthful mode of preparing vegetables for the stomach, or a scientific way of producing disease? Certainly, it will bring about the *American diathesis*. What is this, Mr. SCIENTIFIC AMERICAN? What is the disease of this people? And how induced? Are not you 'aiding and abetting' the same, you, professedly scientific? Verily hath the 'SCIENTIFIC' a mote in his eye. We have not forgotten the criticism of the SCIENTIFIC AMERICAN on our soup recipe, published sometime ago. But we think the above on 'scientific pickles' an original invention, though capable of some 'improvement.'"

It is not surprising that we should sometimes get a mote in our eye, when it is considered that we not unfrequently raise a dust; but having cleared our own vision, we will now proceed to take the beam out of our neighbor's. In a very learned manner, he asserts that our pickles will help to produce the *American diathesis*, and in the very next sentence, he confesses ignorance as to what the disease is, and asks our opinion about it. Such presumption and such abasement reminds us of the old story of "the goose in a quandary, who snored when she slept and dreamed of thunder." It affords us some consolation, however, that we can throw some light upon this subject into our neighbor's dingy lantern. There is no such disease as American, European, or African *diathesis*. This term simply means a particular habit of body—good or bad—and our pickles may produce either doldrums or dancing. We prefer the latter, but the former appears to be the *diathesis* produced by our pickles upon our cotemporary. We cannot conclude these remarks upon this topic without paying a proper compliment to the literary execution of the above extract. In point of erudition, ability, and elegance, we think it deserves a position on the scroll of fame alongside of that famous old nursery rhythm: "Peter Piper picked a peck of pickled peppers— A peck of pickled peppers did Peter Piper pick."

Certificate of Patent Validity.

If a patent is sustained in England in a suit to test its validity, it is customary for the Court to grant a certificate of validity to the patentee. We think it would be well to adopt the same practice in our United States Circuit Courts.