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Ventilated Cooling Apparatus.

Some country houses are so fortunately situated as to have conveniently at hand a never-failing spring, a stream from which, conducted through a proper building, cools the atmosphere and preserves milk, butter, meats, vegetables, and fruits in a fresh condition. The ordinary ice refrigerator in other cases supplies this want, but as ventilation—a continual circulation of air—is not always assured, it is not, under all circumstances, so good.

The apparatus shown in the annexed engravings is intended as a substitute for the spring house, and insures a constant passage of water-cooled air through the receptacle. Fig. 1 shows a box or receptacle intended to receive beer and ale in places where they are kept for use or sale. The receptacle may be of any required size. A tank, A, seen in Figs. 1, 2, and 3, holds a supply of water which is allowed slowly to drop or run through a faucet at the end into a shallow reservoir—B, Fig. 2—from whence it passes to a water grate seen in perspective at, C, Fig. 3, which is placed directly under the tank, A. From the bars of this grate depend sheets of ordinary gauze in light frames—D, Figs. 1 and 2—which are kept saturated by the water that drips from the grate and falls into the lower tank, E, from whence it is pumped up again by the hand pump, F. The cool air enters through the pipe G, Fig. 1, and passes in the direction of the arrows through the wet gauze, where it is cooled, through the receptacle, and out of the escape pipe, H, Figs. 1 and 3 in the latter case into the chimney.

Fig. 1.

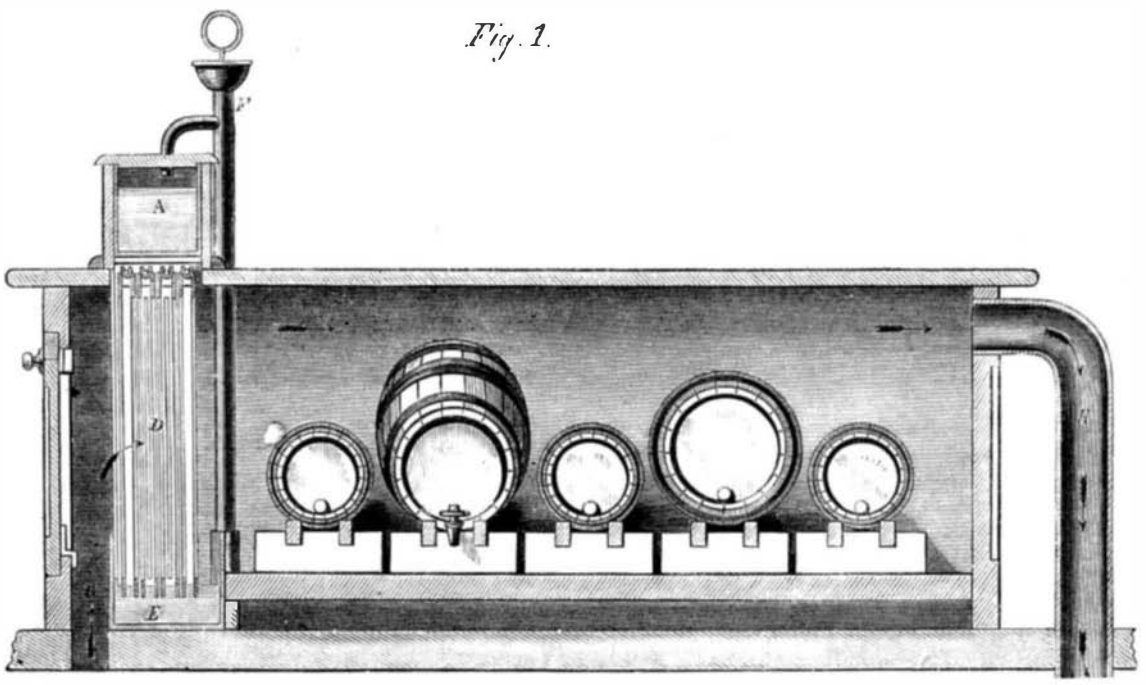


Fig. 2.

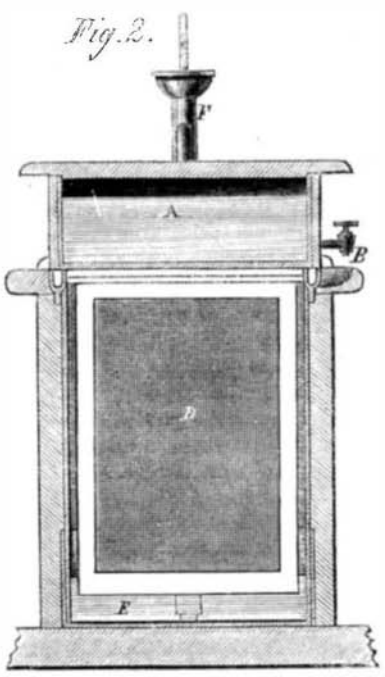


Fig. 3.

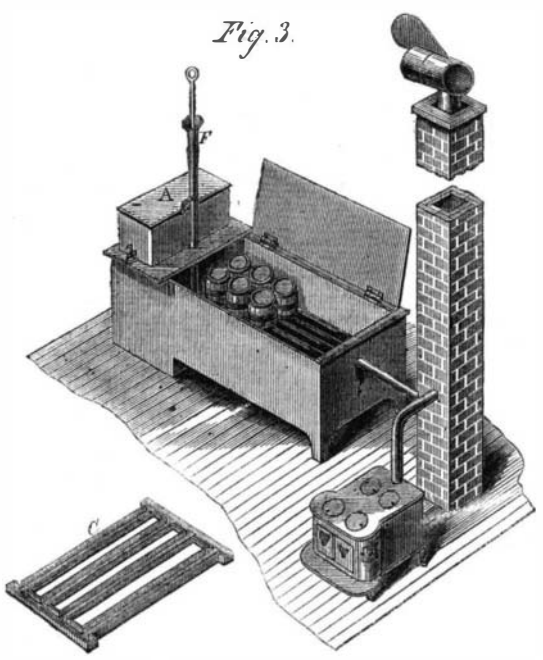


Fig. 3 more particularly represents an adaptation of this device to the dairy or buttery. It is readily understood without further explanation. It is not difficult to comprehend that articles of food can be in this manner preserved in hot weather without contracting any of that close, musty, and disagreeable flavor which is detected often in those kept in the ordinary ice chest. For milk from which butter is to be made, especially, this apparatus would seem to be well adapted. It can in this be kept pure for a sufficiently long time to allow all the cream to rise without being tainted with sourness.

This contrivance was patented through the Scientific American Patent Agency May 29, 1866, by Frederick Villard of Canton, Ohio.

VILLARD'S ROTATING CHIMNEY CAP.

The object of this is a cheap, strong, and sightly ventilator for a chimney top to secure a good draft at all times. Fig. 1 is a sectional elevation and Fig. 2 a cross section at the top of the chimney. The flat, square top, A, is secured to the brick work by long bolts, B, held by clamps C, at the bottom ends. The circle inside the square has an inward projecting lip which receives the ring of the revolving part D. This arrangement prevents the upper portion or bonnet from being displaced by the wind. From the movable ring rise three arms holding a long central socket, E, in which a spindle turns and receives the whole weight of the cap. A vane keeps the funnel opening always facing the wind, which being contracted in volume as it passes through, creates a very strong draft. In Fig. 3 of the preceeding description the cap is seen in perspective affixed to a chimney top. This invention was patented through the Scientific American Patent Agency, March 5, 1867, also by F. Villard, who will reply to all communications addressed to him, relative to the Air Cooler or Chimney Cap, care of J. Abbott, box 69, Canton, Ohio.

Fig. 1.

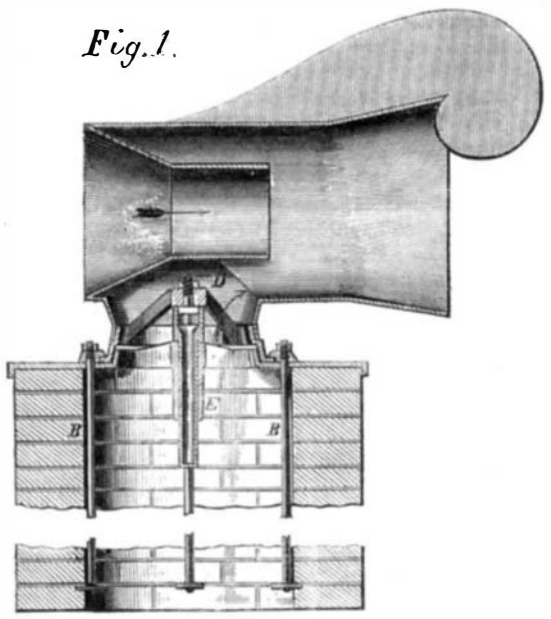
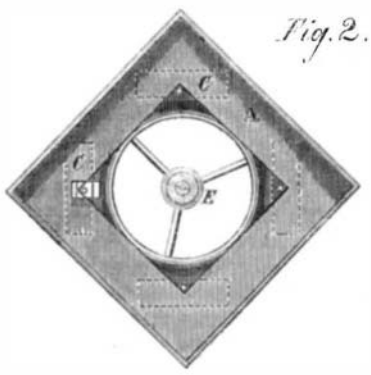


Fig. 2.



The Amazon.

There is a little colony of Englishmen settled at Iquetos, on the Amazon, 3,500 miles from its mouth. William Clark, an English (or is he a Scotch?) engineer, who once worked at Penn's, and who was for some years the chief engineer of the Peruvtan Government, organized an exploring expedition, two or three years ago, to the upper waters of the great river, and is now resident with his companions at Iquitos, in the Peruvian territory. He took out two steamers, boats, machinery, etc., and was accompanied by fifty volunteer soldiers, and by a number of British workmen and their families. The settlement is nearly as far off and is as romantic as was Robinson Crusoe's. There are plenty of cannibals (?) near, and some twenty-five of these rascals were shot in a single day's adventure. Mr. Clark has a foundery and engineering works, and has built and launched a floating dock for the repair of his vessels. From his letters, the upper Amazon appears to be a magnificent country, promising a splendid future. His steamers run regularly down the Amazon, and keep him and his colony well supplied with whatever they require from the outer world. Mills and machinery are already in demand in the neighborhood. Mr. Clark receives his *Engineering* with tolerable regularity. The last time we had the pleasure of seeing him it was in company with poor Holliday, formerly Penn's out-door engineer, and who, while chief engineer of the Ross Winans cigar ship, was lost one night in the Thames, when returning to his ship from Northfleet. Mr. Clark is likely to make a name in Peru.—*Engineering.*

EDITORIAL CORRESPONDENCE.

Ancient and Modern Paris—The Napoleon Family—The Exhibition—The Czar and King William—The Great Review—The Attempted Assassination.

PARIS, June 8, 1867.

I suppose that no other city of ancient or modern times has undergone so many changes as Paris during a period of ten years. The Paris of history is passing away and a new city full of wonders and beauties is rapidly coming in. Twenty years ago Louis Napoleon was tried as a conspirator and condemned to death. Louis Philippe commuted the death sentence to perpetual imprisonment in the fortress of Ham, whence the convict escaped, as is supposed, through the friendly contrivance of his physician. In 1848 Louis Napoleon was the ruler of France, and Louis Philippe became an outcast and a fugitive from his throne and country. In the meantime France has made rapid strides in all that constitutes a great and powerful nation. Her commerce is widely extended, her manufactures are flourishing, and to all appearance the people are happy and contented. There is, however, a great diversity of opinion about the personal popularity of the Emperor; yet I think, on the whole, that he satisfies the people. It is generally admitted that his fillibustering expedition to Mexico was an unwise and foolish scheme, and I am certain that the people rejoice at its failure. This constitutes one element that has somewhat impaired the faith of the French in the shrewdness of their Emperor. It also shows the practical value of the sympathy of the United States when extended to a struggling people whose liberties and rights were sought to be usurped by a foreign despot.

I remarked that the Paris of ancient time was rapidly passing away. If the visitor goes to the cathedral of St. Denis, he will find that revolutions have despoiled that place of many of its rarest objects of interest, and instead of the tombs of the ancient kings he will be shown the place where their remains were thrown into one common trench. If you visit the splendid Pantheon church, it is true you will find the monuments of Voltaire and Rousseau, but the remains