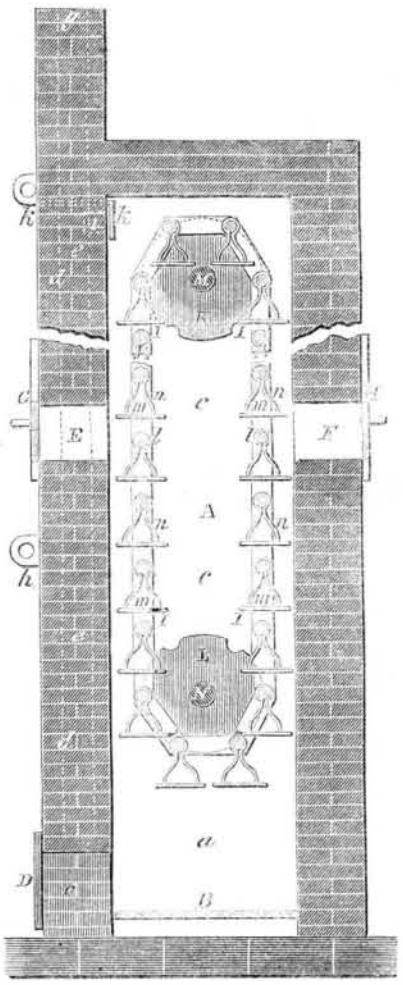
New Inventions.

Jennison's Oven.

The making of bread is undoubtedly one of the oldest of antediluvian culinary operations; and since those days how many batches have been lost or spoiled by baking would take two "calculating boys" and a few good mathematicians all their lifetimes to discover. But *we* cannot blame those good house-wives of antiquity, even if their husbands did, because we can appreciate the rudeness of the arrangements for baking which they possessed—a hot stone, or the ashes of a fire. Now-a-days, O shades of ancient bakers! happy hours have fallen upon your posterity, and the aspect of the times is changed; and you, ye dames of old! think of bread always properly baked, "done to a turn," as ye would say; for this is the age of progress, and even ovens have been improved so much that they can be relied upon for doing their work regularly and up to time. One of these improvements has been made by G. C. Jennison, of Ware, Mass., and forms the subject of the present illustration, which is a vertical transverse section of it.



A is an elongated hollow, vertical column, square or about so in horizontal section, and covered at top, the lower part of the space within the column being provided with a grate, B, extending across it. An opening, C, made through the front wall of the hollow column is furnished with a door, D, and constitutes the mouth of the furnace, all the space above being what may be termed the baking chamber.

Openings, E F, made through the front and and rear walls of the column and at the lower part of the baking space are respectively furnished with sliding doors, G H, and serve to give access to the shelves of the endless carrier and for the purpose of supplying the same with dough or other articles to be baked as well as for removing such as may have been baked.

In the front wall, *d*, are one or more flues, *e*, which extend upward from and open out of the upper part of the furnace, *a*, and terminate in the chimney, *g*, the flues, at or near their opening into the furnace, being respectively furnished with closing slides or valves, *h*. These flues have other openings or passages, *i i*, leading into them from the upper part of the baking chamber, each of the openings, *i i*, being provided with a closing slide, or damper, *k*.

Within the column, A, is a long endless carrier, I, which plays around sprocket wheels, K L, fixed on two horizontal shafts, M N.

From each of the hinge bars, *l*, of the endless carrier, a shelf, *m*, is suspended by arms, *n n*, which swing freely on the bar so as to enable the shaft by its gravitating power to always maintain its horizontal position at whatever altitude it may be or during the entire circuit of the carrier.

On the outer end of the lower shaft of the endless carrier, a cranked and notched wheel, may be fixed, a pawl, serving to arrest its motion or that of the carrier by being thrown into one of the notches of the wheel.

In operating with this oven, it is calculated to use anthracite coal, but it is by no means confined to that fuel, as there are various other kinds which will answer. After the upper dampers have been closed and the fire has been built in the grate, the volatile products of combustion will escape into the flues, by means of their opening at the lower ends, much of the heat from such passing upwards into the baking chamber, by which means it will become rapidly heated.

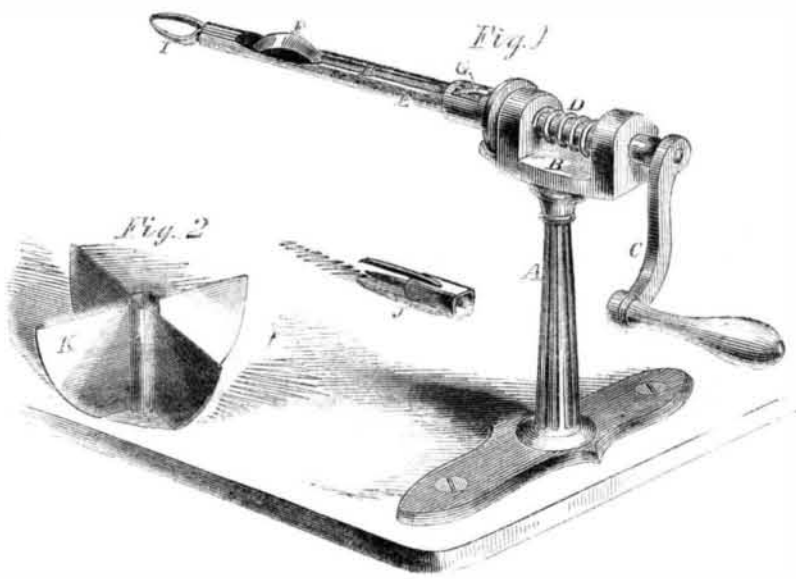
The temperature of the baking chamber may be controlled by means of the upper dampers, as by withdrawing them more or less, we open their passsges into the flues, and allow more or less of the heated air, steam, &c. to escape.

The bread to be baked is to be supplied to the shelves of the carrier through the supply-opening, E, the carrier being supposed to have an intermittent movement imparted to it such as will run each shelf in succession up to the opening, E, and then suffer it to remain long enough to receive its supply of dough. As the shelves pass upward into the baking space, their dough will be subjected to the action of the heat, and will be baked within a vaporized atmosphere. As the shelves successively pass by the opening, F, the bread on them may be removed from them through the latter opening.

The advantages of this improved oven are, great economy in fuel, the bread is baked without being smoked or injured in the least, and both evenly and thoroughly.

This invention was patented Feb. 1, 1859, and any further particulars may be obtained from the inventor by addressing him as above, where an oven may also be seen in operation.

ALCOTT'S APPLE CORER.



Ever since that little affair between our common mother and the snake, mankind have been fond of apples, and the numerous varieties into which the primeval apple has ramified itself is truly surprising. But, as if to show the vanity of all earthly things and how the sweets are mixed up with the bitters (but the sweets predominate), even the sweet apple in common with the sour crab has a bitter core, which, although of great use to the apple, for it holds its seed, is of so little use to us that we actually invent machines to cut it out. The subject of the present invention is one of these, and one that cuts out the core cleanly and well. At the ends the core is very small, gradually increasing in size towards the center, where it bulges out quite extensively compared to the modest manner in which it commences at the stalk and end. Now, a machine which will cut out the core, making a round hole all through the apple, will, of course, waste much apple, and if the diameter of the core at the ends be taken as a gage, the hole at the center will not be cut out. A. N. Alcott, of Gowanda, N. Y., has therefore invented an apple-corer which cuts out all the core without wasting the juicy flesh of the apple.

Fig. 1 is a perspective view of it, standing on a table or board. It consists of an upright post, A, on the top of which is a bearing, B, for a tubular shaft, E, that is kept in its place by the spring, D, and that can be rotated by the handle, C. To the end of E is secured a cutter, I, that is formed of two small bent knives. The apple being placed against these while they are being rotated, they quickly cut their way through it, separating all the core except the center. In this tubular shaft, E, lies a curved knife, F, pivoted through its lever handle, H, to E, and F can thus be made to project or lie flush by operating the other end of H by sliding the cap, G. The apple, when partly cored by I, is pushed on E, until its center comes over F which is then pushed out, and, of course, cuts away all the core.

This machine may also be made into a parer by placing the three-pronged holder, J, over I and placing the apple upon it, it can be pared very quickly by hand, as the hand has only to move toward the opposite end of the apple, following the curve of its surface. For quartering, the device seen in Fig. 2 may be used; it is very simple being nothing more than four plates of metal, K, sharpened at their edges and attached to and radiating from a central vertical tube. The apple is pressed on this, the core falls through the central tube and the quarters between the knives, K.

It was patented Feb. 22, 1859, and the inventor will be happy to give any further information, upon being addressed as above.

A Healthy Sign of Progress.

It is one of the signs of true progress to witness the present activity of inventors. As a marked indication, we may refer to the fact that for the week ending the 26th ult., forty-two applications for Letters Patent were made through the Patent Agency Offices connected with the Scientific American.

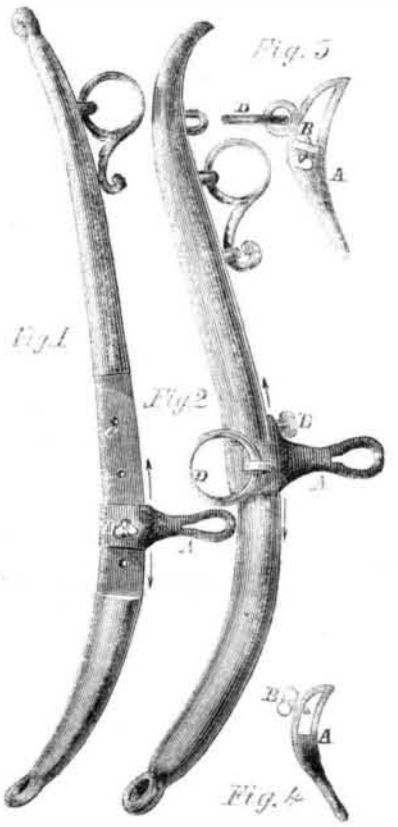
Mahogany for Ship-Building.

Some experiments have recently been made at Bordeaux, France, to test the strength of oak, teak, and mahogany. A stick of each kind of wood, four inches square, was placed crosswise in a machine for testing the strength of ships' cables, and a ring secured to its center. A strain was applied to it; the oak broke at a strain equal to 3,960 pounds, the teak, with a strain of 7,260 pounds, and the mahogany, with a strain of 7,480 pounds.

The foregoing given by one of our cotemporaries with an admonition to employ mahogany in place of oak for ship-building.

There must be something wrong about these statements, as American white oak is much stronger per square inch than the stick four-inch square experimented with at Bordeaux. The cohesive strength of white oak per square inch cross section is 11,500 pounds, mahogany, 21,000 pounds. It is well known that mahogany is stronger than oak, but it is too expensive to use for ship-building.

Cogswell's Improved Hames.



The shafts of different vehicles vary in height, and horses are by no means all of the same size. Now it is important for the horse when drawing a vehicle, that the line of draft from the traces should always come in the same place on the horse, which cannot be the case when the eye is rigidly attached to the hame, for if it be properly set for one horse or vehicle, it is obvious that it must be far from correct for another horse or vehicle.

The invention we are about to describe, provides for this by making the eye adjustable to suit any circumstances or occasion.

Fig. 1 is a carriage hame, light and elegant; a recess is made in it as seen at C, and the slide, A, to which the trace is attached, can be adjusted and secured to the desired position by the screw, B. A side view of this slide is seen in Fig. 4. Fig. 2 shows the common team hame, provided with this improvement., which slides on the common hame either up or down as indicated by the arrows, and can be secured by the screw, B, which in this instance is placed through a tongue in the side of A, and not as in Fig. 1. To the slide in the team hame a ring is attached, to hold the pole-straps of the harness; and the whole slide is seen in Fig. 3.

The inventor of this improvement is Henry Cogswell, of Greenwich, N. Y., who will be happy to furnish any further information upon being addressed as above. The patent was dated Feb. 15, 1859.