

## New Inventions.

## Solid Ink.

M. Leonardhi, of Dresden, has invented an ink which he can form into cakes for convenience of transport. The inventor takes forty-two parts of Aleppo galls, and three parts of Dutch madder, and infuses them in a sufficient quantity of hot water. The solution is then filtered, and five and a-half parts of sulphate of iron are dissolved in it, after which two parts of acetate of iron and one and one-fifth part of liquid sulphate of indigo are added. The whole is then evaporated to dryness, and the residuum molded into cakes. One part of this dry ink dissolved in six of hot water gives an ink of first-rate quality; but one of good quality may be obtained by adding even fifteen parts of hot water.

## Improved Method of Heating Buildings.

William H. Churchman, of Janesville, Wis., has invented an improvement in the method of heating apartments, &c. The invention consists in arranging within the double walls of a furnace, placed in the basement or other suitable part of the building to be heated, a series of rarifying metallic drums, to which a moderate degree of heat is imparted, and causing these drums to communicate, by suitable pipes at the upper and lower parts, with venti-ducts or flues extending through the walls of the building to the respective apartments to be heated. These pipes and flues are so arranged as to produce a continuous draft of air from the apartments through the drums, and thence back again to the apartment in a heated state. By this means each apartment is treated as a distinct reservoir of air, and under all conditions of the weather the room is supplied with a mild and genial warmth, entirely free from dust, smoke or sulphurous gases. The claim will be found on another page.

## Improved Felly Bending Machine.

The old style of making fellies in half-a-dozen pieces by the laborious processes of axe and saw, is quickly going out of fashion, and bent fellies are rapidly taking their place; the bent felly has so many advantages, chiefly owing, perhaps, to the grain of the wood being, as it were, continuous, and passing in a circle around the wheel, thus adding a natural stability to the construction which the cut felly does not possess.

Mr. J. L. Mann, of Blandford, Mass., has invented an excellent machine for bending fellies, which prevents any breaking of the outer fibers of the wood, and bends by squeezing the fibers on the inner side closer together.

In our engravings, Fig. 1 shows the whole arrangement. A is the frame of the machine, B the mounted forming block, made in the shape of a half cylinder just the same radius as the wheels for which the fellies are intended. B is mounted on wheels, C, and can move to its position, or be moved away by the rails, D, or car, E, also moving on rails, F, to bring it in juxtaposition with the rails, G, on which, when full, it can be moved away.

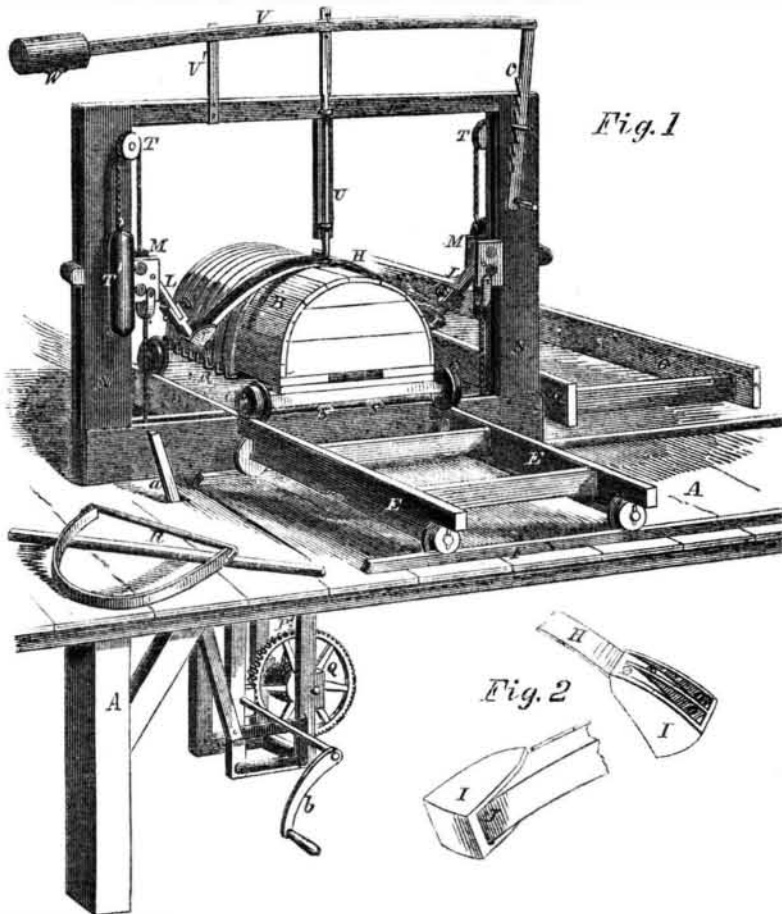
The fellies are bent upon the forming block by means of a band of iron, H, in length equal to the length of the felly. A head, I, (seen detached in Fig. 2,) is fixed to each end of this band, having a seat, J, inside, that receives the ends of the unbent fellies. The heads, I I, are pressed downwards and inward by an arm, L, which articulates in moving fulcrums, M, that are guided in their upward and downward movement by posts, N, which receive between them a T-head from the fulcrum, M. When the moving fulcrums, M, are up, the arms, L, lie nearly vertical, the lower and divided rods fitting into the steps, o o, in the head, I (seen in Fig. 2). As the moving fulcrums descend, the arms, L, assume an inclined position (as seen in Fig. 1),

and thus press the heads, I I, snugly to the sides of the forming block, with the felly inside of it. M is drawn downward by cords, P, which pass around friction rollers, S, and a windlass, Q, turned by a crank, b, and gearing.

The fellies when first bent are held in place

upon the forming block by a gripe, R, which grips the heads, I, and holds them close to the forming block, and so allows the former to be moved a little back, the windlass released by the lever, a, when the weights, T', attached to cords passing over pulleys, T, and connected with M, quickly bring them up to

## MANN'S FELLY-BENDING MACHINE.



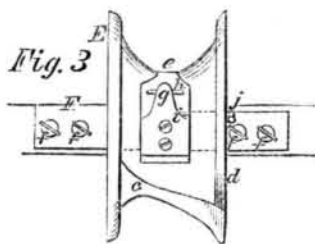
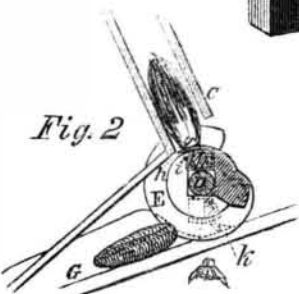
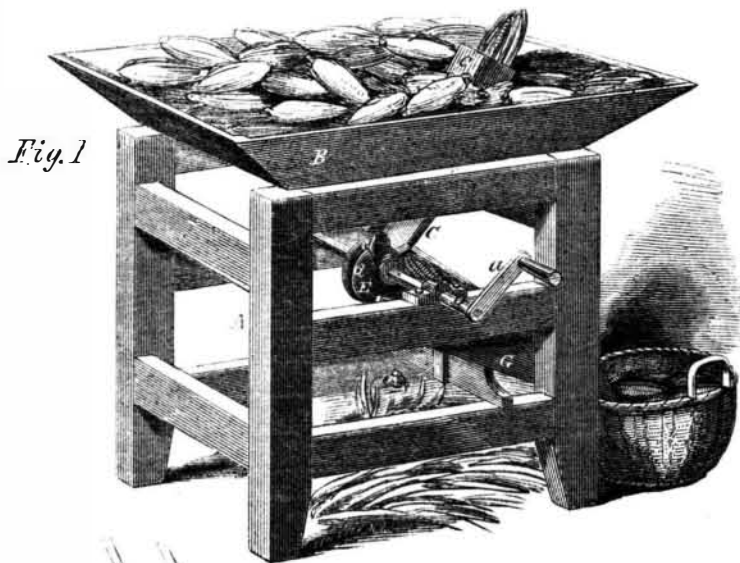
the top of N, ready for another felly to be bent.

The machine is used in the following manner:—The fellies are sawn or split, and cut square at the ends, just long enough to enter the seats, J, upon the inside of I, the band, H, being on the outside of the felly. The felly being thus prepared, is placed upon the mounted forming block, B, and the rod, U, brought down firmly upon it—as seen in Fig.

1. This rod is attached to a lever, V, whose fulcrum is at V', whose long arm is provided with a toothed handle, c, by which it can be held firmly in place. The short arm is provided with a weight, W, that raises U as soon as c is released. U holds the felly securely on the forming block while being bent.

It was patented August 31, 1856, and any further information can be had by addressing the inventor as above.

## MEACHAM'S CORN HUSKER.



So great a feature of our agricultural community has corn-husking become, that in some States the period is made one of jollity and fun, so that the pleasant joke and ringing laugh may, in some measure, counteract the unpleasantness of the work; this is verita-

ble wisdom. But it would be wiser still were the farmers to provide themselves with some good corn-husking machine, and do in a few hours what, by hand labor, would occupy many days.

The subject of our illustration is a corn-

husking device, the invention of B. B. Meacham, of Ridlyville, Fla., and was patented by him May 25th, 1858. It is simple, and will be understood from the following description.

A represents a rectangular frame of wood or metal, supporting a hopper, B, having an inclined spout, C, projecting through the bottom of it. These parts are seen in the perspective view, Fig. 1. D is a shaft placed in the frame, A, and provided with a crank, a, or driving pulley, at one end. On the shaft, D, at about its center, a wheel, E, is placed—seen also in the vertical section of the cutting device, Fig. 2, and detached view, Fig. 3. This wheel is grooved circumferentially, and has an oblique partition ledge, c, extending across the groove, the wheel having also an opening, d, in its side, at one end of c. A smaller or narrower groove, e, is also made circumferentially in the wheel, E. A bar, F, passes transversely through E in a mortise, and is adjusted nearer to or further from the shaft, D, by set screws, f.

To the outer surface of F a knife or cutter, g, of pointed form, is attached; and a forked plate, h, attached to an arm, i, fits over the knife, the point of which projects through the fork. The arm, i, of h, passes through the side of the wheel, and its outer end is bent at right angles with its other part, as seen at j. G is an inclined trough or spout placed in A, the upper end of the trough being by the side of wheel E.

The operation is as follows:—The shaft, D, is rotated, and the ears of corn in the husk are placed one by one, butt foremost, in the spout, C. They fall down C, and their butts pass into the groove, e, in E, and as the knife or cutter, g, passes around, it cuts the butt from the ear directly at its junction with the ear, the knife being properly adjusted to effect this by adjusting the bar, F; and the knife also strips the husks from the ear, they adhering to the butt. The ear being deprived of its integuments, is, by means of the oblique partition or ledge, c, conveyed into the upper end of the trough or spout, G, from whence they fall directly into any proper receptacle prepared for them. The butt and husks which adhere to g, are forced therefrom by the forked plate, h, which is moved outward so as to strip the knife, in consequence of the outer bent portion, j, striking against a projection, k, on the trough or spout, G.

Thus it will be seen that the corn is quickly and completely husked, and the machine is very convenient and compact. The inventor will be happy to give any additional information upon being addressed as above.

## Improved Refrigerator.

A. Lipmann, of this city, has invented an improved refrigerator, in which he arranges a series of coiled pipes, emanating from the sides of an ice chamber, in such a manner that they descend between the walls of the refrigerator, where they are surrounded by some non-conducting material; they are then connected at their lower ends with another coil, that extends through a central tube from top to bottom of the refrigerator, and back into the ice chamber. The cold air from this chamber is caused to descend through the first named series of coiled pipes, and to ascend and flow back through the central coil, and by this circulation of cold air, the temperature in the refrigerator may be brought to a very low degree with a comparatively small amount of ice. It was patented this week, and the claim will be seen in another portion of this paper.

## Machine for Sawing Fellies.

This invention consists in the use of two or more band or annular saws, attached in a peculiar way, to the under side of a horizontal rotating wheel, and using in connection with this wheel an adjustable bed or platform, the whole being so arranged that fellies may be rapidly sawn from the bolt, and of varying sizes as required. The inventor is D. E. Butler, of Chesterfield, Ohio, and it was patented this week.