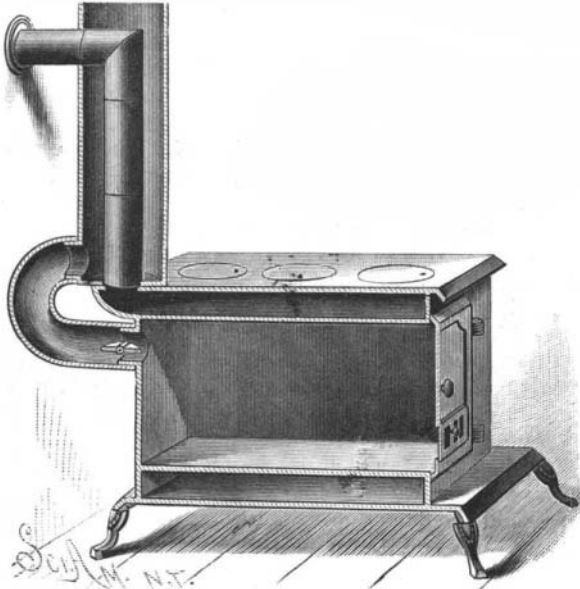


COMBINED RANGE AND HEATER.

The illustration herewith is a sectional view, through the oven, of a novel construction of range, especially designed to furnish heat, if desired, to the upper rooms of a building. At the top and bottom are the spaces for the passage of smoke and the products of combustion to the pipe, in the usual way. The oven itself is, however, connected to a heat passage or drum by an opening in the rear, at the top, in which is a damper, and this heat passage leads to a larger heat pipe or flue surrounding the smoke pipe, and leading to an upper room. In the oven door is a damper and slide, so that, when the oven is not needed for baking, these may be opened to admit a current of air, to be there heated and sent through the damper at the rear into the flue leading up, the openings in both door and flue to be closed, however, when the oven itself is to be used. It



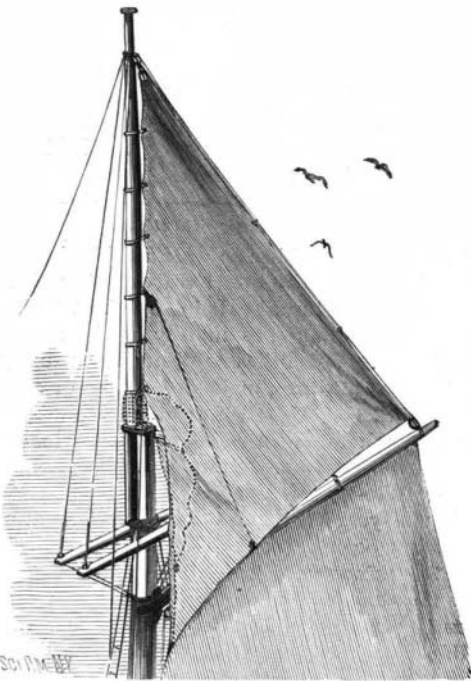
YOUNGMAN'S PORTABLE RANGE.

is not always necessary to the economical application of this method that the heating flue should surround the smoke pipe, and it is obvious that, instead of the curved pipe at the rear, two ordinary stove pipe elbows may be placed together to make an angular, but sometimes more readily obtainable, construction.

This invention has been patented by Mr. John P. Youngman, of Hazleton, Pa.

IMPROVED MEANS OF FURLING TOPSAILS.

According to the custom heretofore, the topsail clew line is made fast to the foot of the sail at or near the



LOVELAND'S IMPROVEMENT IN FURLING TOPSAILS.

tack, or to the body of the sail, running thence through a block secured to the clew of the sail, up over a second block fastened to the head, and thence to the deck; but, when the tack and sheet are loosened, and the sail thrashing, the sheet is apt to foul the block at the clew, as well as the clew line rove therein, and thus interfere with hauling in the clew line. This difficulty is obviated by the invention herewith illustrated, in which two brails are employed, the line of one being made fast to the lower outer corner of the topsail, from which it runs up along the sail, through grommets or thimbles, over a block at the head, and thence down at one side of the mast to the deck. The other line is made fast to a grommet secured in the foot of the topsail, about one-third of the distance from the tack to the clew, and this line runs up over a block secured to the luff of the topsail, about a third of its length from the bottom, and thence down to the deck at the same side of the mast as the first line. In clewing up the topsail, the tack, or rope to hold the lower corner of the sail in position, and the halyard

passing over the block at the masthead, are loosened in the usual way, and the brails hauled in, serving to draw in the clew and foot of the topsail to the points indicated by the termination of the dotted lines against the mast, where the sail bellies out in a ball, and the tackle is free. To utilize this means of furling sails, no alterations in the sail or new running gear are necessary, further than an extra brail.

This invention has been patented by Mr. William T. Loveland, of New Gretna, N. J., and for particulars address John Curtin, 98 West Street, N. Y.

Texas Marble.

The San Antonio *Light* says: When the San Antonio and Aransas Pass Railway was pushing its way to Boerne, the Beckmans gave the railway the right of way through their land, they holding something in the neighborhood of 2,000 acres directly in the line of the road and near San Antonio. In blasting the rock for a passage for the road, a peculiar hard rock was thrown out, which, on closer examination, proved to be the finest kind of pure white marble, and further investigations showed that the supply was practically inexhaustible. They are now making arrangements to open the quarries.

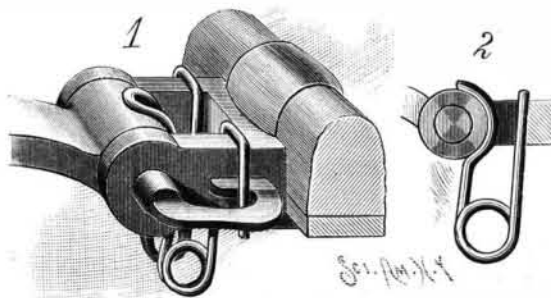
A COMBINED UNIFORM AND CIVILIAN'S BUTTON.

Those who have to appear occasionally in official dress, with buttons of a special design, but do not wish to afford a suit of clothes for that particular purpose, may, by the invention herewith illustrated, provide themselves with the required official buttons for such garments, so made that the tops of the buttons carrying the design can be readily removed, leaving the garments with only such appearing buttons as ordinarily worn on civilian's dress. In our engraving Fig. 1 shows the putting on of the design face over the ordinary button, Fig. 2 is a central sectional elevation of the button, and Fig. 3 represents details of the means of attaching the top. The main supporting ring, the inner one of Fig. 3, has a facing plate, above which is mounted a dome, held in position by a spiral spring. Clamping hooks are mounted between lugs or ears secured to the inner face of the main supporting ring, the upper ends of the hooks being connected by links to the under side of the dome, so that as the latter is forced downward the hooks will be carried to the position in which the hook on the left is shown in Fig. 2. Between outwardly extending flanges of the inner ring is fitted an outer ring, having wedge-like projections on its inner face, as shown in Fig. 3, and in applying the attachment this ring is turned so that the wedge-like projections will be moved to a position out of line with the hooks, when the dome is depressed, and the detachable portion applied, the points of the hooks engaging in a groove formed around the outer edge of the civilian's button, which is so constructed for use with this attachment. The attachment of the button to the garment may be by sewing or any usual means.

This invention has been patented by Mr. Louis D. Frenot, of No. 383 Mulberry Street, Newark, N. J.

A SECURE AND NON-RATTLING THILL COUPLING.

Our illustration so plainly pictures the novel features of a simple thill fastening that its construction and application will be readily understood, Fig. 1 showing the device in perspective, as connecting the thill to the wagon axle, and Fig. 2 being a sectional view illustrating the spring clasp of the fastening upon the eye of the shaft iron. The bolt, as will be seen, is of novel construction, being formed with a hooked head, the point of the head being carried around so as to extend toward the shank of the hook, and leave ample space for conveniently attaching the fastening. The latter consists of a single length of spring wire that is centrally bent to form the loop shown around the inside of the eye of the shaft iron in Fig. 1, the two lengths then extending downwardly, where each is shaped into a single coil and carried upward and bent over the extensions of the axle clip on either side, one end thus securely holding the hooked head of the bolt to



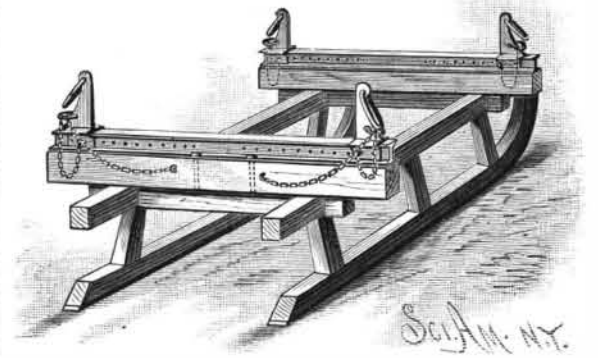
TORRANCE'S THILL COUPLING.

the axle clip. The bolt is also formed with an aperture at its farther end, in which a cotter may be used in case the fastening attachment is lost or damaged.

This invention has been patented by Mr. John Torrance, of Chetopa, Kansas.

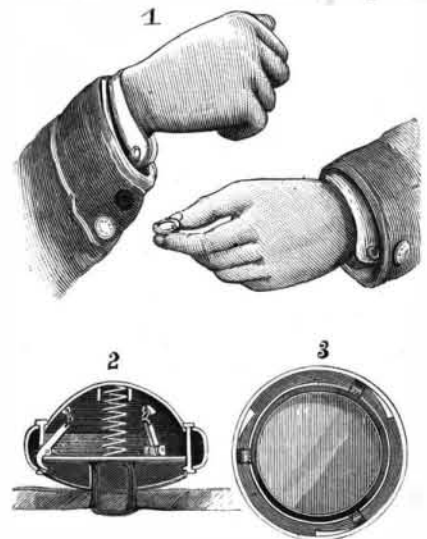
A TIMBER BUNK FOR SLEIGH OR OTHER VEHICLE.

Lumbermen using the imperfect means heretofore employed for securing logs or timber to sleighs, wagons, cars, or similar conveyances, will appreciate the simple and efficient device presented in the invention of Mr.



DANIELSON'S TIMBER BUNK.

Danielson, which will be readily understood by reference to the illustration, where the bunk is shown as applied to a sleigh. The device comprises a cross bed beam, to which there is bolted a double angle iron, upon which are mounted two sliding blocks having downwardly extending side flanges, fitting against the web of the angle iron. The web has a number of apertures for the reception of a retaining pin carried by a chain attached to each of the blocks, whereby the blocks, when moved forward or backward into any desired position required for the support of the load, may be firmly held where placed. The blocks, to prevent their



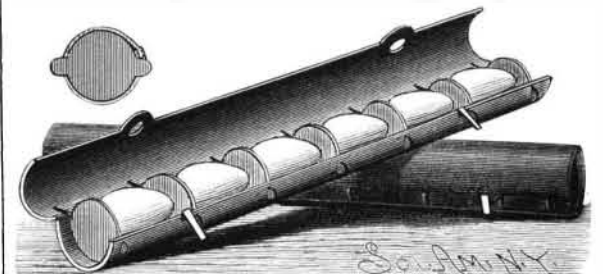
FRENOT'S CONVERTIBLE BUTTON.

being lost or misplaced, are permanently attached by a chain to the bed beam. The blocks also have swinging rings, through which binding chains may be passed, such as it is sometimes necessary to throw over the load to more securely hold it in place.

This invention has been patented by Mr. John A. Danielson, of Calumet, Mich.

IMPROVED PACKAGE FOR CARRYING EGGS.

A cheap, simple, and convenient egg case or holder, in roll form, by the use of which eggs may be car-



FRAZEE'S EGG CARRIER.

ried with little risk of breakage, is shown in the accompanying illustration. The body of the package or case may ordinarily be made of pasteboard, bent to the required form, and the lid may be made integral with the main portion by longitudinally slightly incising the roll thus formed, on its inner face, so that the two parts will thus be hinged together. The interior of the holder is divided into the desired number of compartments, each to hold an egg separately, by partitions in the form of a disk, as shown in the small figure, each disk having ears or projections made at opposite sides, which fit in slots made in the body portion, and in the joining body and cover portion, of the holder. These partitions may also be made of pasteboard or of wood or other suitable material. When the package is to be much handled, the eggs should be wrapped in paper, cotton, or other flocculent or suitable material. To hold the roll closed, suitable pliable catches are provided.

This invention has been patented by Mr. John Frazee, and for further particulars address P. L. Tourchy, 3½ Carondelet Street, New Orleans, La.