

C. BARTELS.
SAFE OR VAULT WALL.
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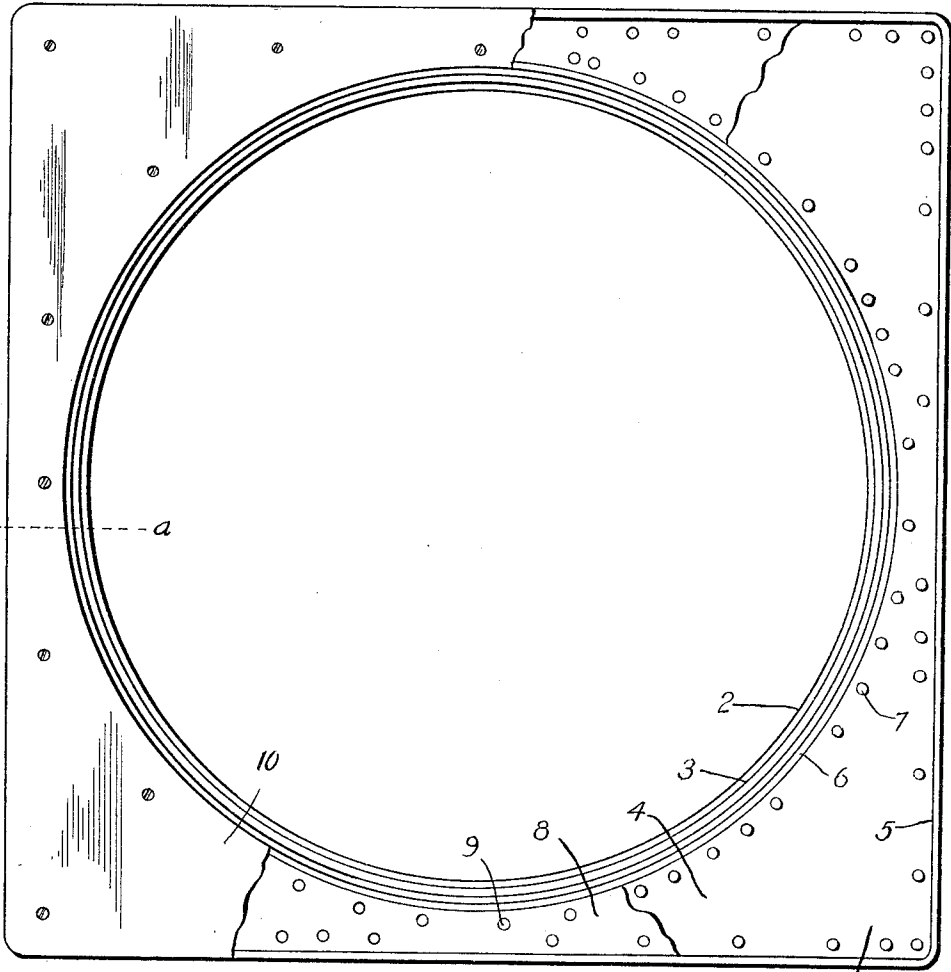


Fig. 1

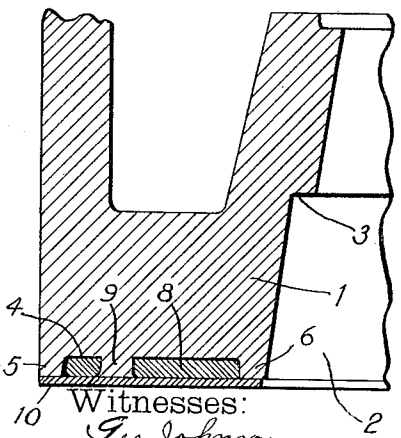


Fig. 2

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SAFE OR VAULT WALL.

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To all whom it may concern:

Be it known that I, CARL BARTELS, a citizen of the United States, residing at Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Safe or Vault Walls, of which the following is a specification.

This invention, pertaining to the construction of the walls of safes or vaults relates particularly to such safes or vaults as are composed mainly of unmachinable metal, such as manganese steel, the aim of the present invention being to provide the exterior of the wall, particularly the wall containing the door-opening, with means by which hinges etc., may be conveniently attached.

The invention will be readily understood from the following description taken in connection with the accompanying drawing in which:—

Figure 1 is a front elevation of the front wall of a round-door safe, portions of certain front-work being broken away to more clearly illustrate the construction; and Fig. 2 a horizontal section, upon an enlarged scale, through the door-jamb in the plane of line *a* of Fig. 1.

In the drawing:—1, indicates the front wall of a safe assumed to be of unmachinable metal; 2, the door-opening therein illustrated as being circular as is usual in safes made of the material in question; 3, the steps of the door-jamb; 4, a shallow recess formed in the entire front of the wall except as to the margins hereinafter referred to; 5, the outer margin of the recess, this margin forming also the margin of the walls; 6, the inner margin of the recess, this margin surrounding the door-opening; 7, studs projecting from the safe wall into the recess, these studs being formed integrally with the metal of the wall and having a length substantially equal to the depth of the recess; 8, a plate of machinable metal disposed within the recess, and preferably filling it, this plate being provided with apertures engaging studs 7, the outer ends of which studs are riveted after the plate is in place, 7 indicating the studs in unriveted condition; 9, the studs in riveted condition, and 10, a mask-plate secured against the outer face of the plate and margins, as by means of screws passing through the mask-plate and threaded into plate 8.

While manganese steel cannot be cut it can be ground and it can be riveted. Plate 8, having been fitted to the recess and studs, the studs are then riveted at the front face of the plate, thus practically unifying the plate with the wall. The mask-plate, which may be of any machinable metal and as ornamental as desired may then be applied to place, covering the riveted ends of the studs. Owing to the fact that the edge joints of the plate are covered by the mask-plate it is not necessary that the plate fit with any special accuracy or niceness against the margins of the wall. Hinges etc., may be secured to the plate by the usual system of screws, owing to the fact that the plate may be drilled and tapped, and it will readily be understood that for this purpose the plate need not be applied over the general surface of the wall but only at such portions of the wall surface as required to be dealt with by means of cutting tools. Hinges, etc., may be secured against the mask-plate by means of screws passing through the mask-plate and into the riveted plate, or they may be secured directly to the riveted plate, the mask-plate being suitably notched to permit this.

The riveted plate may be permanently secured in place and then the hinges etc., may be secured to it, as has been indicated, or, if preferred, the riveted plate may be fitted to place and the riveting omitted, after which the plate may be removed from the wall and fitted up with hinges etc., after which the plate may be returned to place and the riveting done and the mask-plate applied.

I claim:—

1. A safe or vault wall comprising, a wall consisting of unmachinable metal, studs integrally formed with the wall and projecting from its front face, a plate of machinable metal having perforations engaging said studs and secured to the wall by riveting the studs at the outer face of said plate, and a mask-plate secured to the outer face of said perforated plate, combined substantially as set forth.

2. A safe or vault wall comprising, a wall consisting of unmachinable metal provided with projecting margins to form a facial recess, studs integrally formed with the wall and projecting from its front face into said recess, and a plate of machinable metal dis-

posed within said recess and having perforations engaging said studs and secured to the wall by riveting the studs at the outer face of said plate, combined substantially as set forth.

3. A safe or vault wall comprising, a wall consisting of unmachinable metal provided with projecting margins to form a facial recess, studs integrally formed with the wall and projecting from its front face into said recess, a plate of machinable metal disposed

within said recess and having perforations engaging said studs and secured to the wall by riveting the studs at the outer face of said plate, and a mask-plate secured to said perforated plate and covering the joints between said margins and the edges of said plate, combined substantially as set forth.

CARL BARTELS.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."