(No Model.)

J. FARREL.

SAFE FOR EXPRESS TRANSPORTATION, &c.

No. 346,275. Patented July 27, 1886.

Fig. 1.

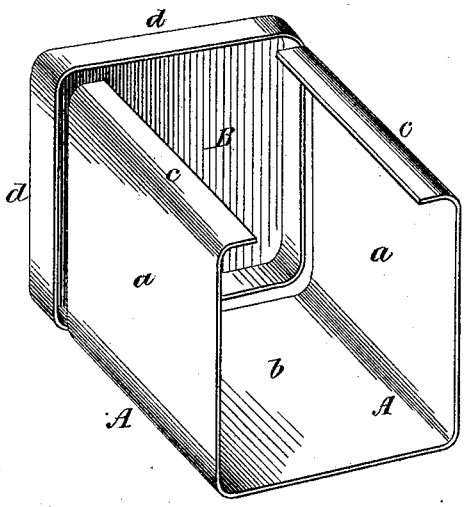


Fig. 3.

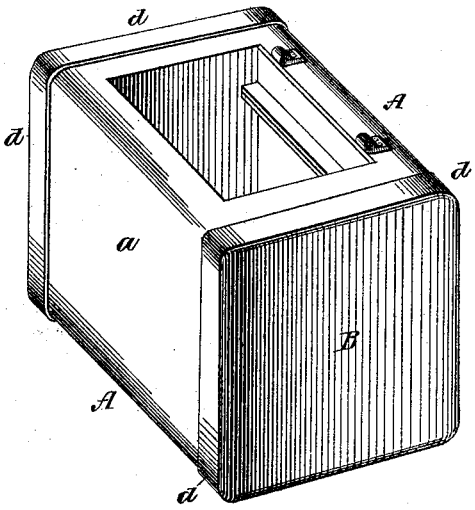


Fig. 2.

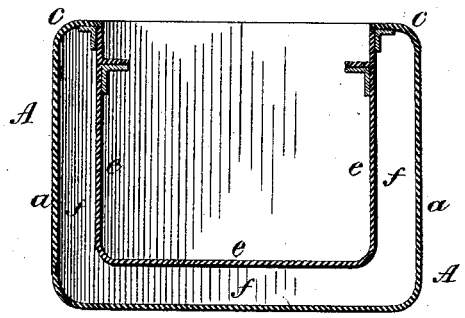
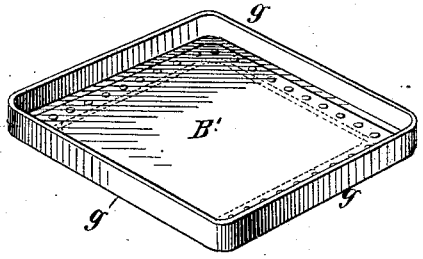


Fig. 4.



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SAFE FOR EXPRESS TRANSPORTATION, &c.

SPECIFICATION forming part of Letters Patent No. 346,275, dated July 27, 1886.

Application filed April 10, 1886. Serial No. 198,505. (No model.)

To all whom it may concern:

Be it known that I, JOHN FARREL, of the city, county, and State of New York, have invented certain new and useful Improvements in Safes for Express Transportation and other Purposes, whereof the following is a specification.

My improvements relate particularly to safes for transportation of valuables by express companies, called "express messenger chests," but are applicable elsewhere.

The object of my invention is to provide a safe or chest that is stronger and better fitted for withstanding rough usage than those now in use, and this without adding to weight.

In carrying the invention into practice it is my aim to avoid having seams or joints at the corners, whether made by welding or otherwise.

Heretofore the sides, back, and ends of this class of safes have been made of a number of separate plates united at the corners. In some cases the sides and ends have been made from one sheet of metal, but leaving the back to be inserted as a separate piece, as practiced in constructing other safes. By either mode of construction the back is regarded as the weak point in the safe.

In my structure the back plate is made integral with the side plates, and the latter are also in one with the stiles of the casement or border of the safe around the door.

Referring to the annexed drawings, Figure 1 is a descriptive view showing the mode of constructing the shell or body of the safe. Fig. 2 is a cross-section of the body with the inner shell added, ready for the "filling." Fig. 3 shows the safe complete in readiness to receive the door, showing also a slight modification of the construction of the body of the safe. Fig. 4 is a modification.

A indicates the main portion of the shell or body. It is formed from one sheet or plate, as by bending up the sides *a* from the back *b*, and then bending the extremities *c* of the sheet inward to the opening left for the door. This produces four of the corners without seam. To secure strength in the remaining corners and form the end pieces, B, of the shell, such corners are also made integral with the end plates and without seam at the angle, as by swaging over the edge or margin *d* of such end plates, as seen in Fig. 1, so as to fit snugly over and around the end edges of the shell. These end pieces, B, are then permanently secured to the shell by rivets, or by strong screw-bolts rusted into their seats. In this manner I form the body of a safe or chest with a solid back and sides in one piece, and without a joint at any one of the corners, thereby avoiding all liability of the opening of seams at these points by wear and tear. The construction imparts elasticity to the ends, and with the guards afforded to the sides by the flanged margin of the end plates the shell or body is so well protected that in falling or being thrown from a wagon the safe escapes serious injury, no matter in what part the concussion be received. Having thus formed the outer shell, I add an inner shell or lining, *e*, preferably of hard-rolled paper-board, as being light, elastic, and less combustible than wood, and then fill the intervening space, *f*, with a suitable fireproofing or fire-repellent substance or compound. In so filling the safe it is placed on end, with one of the end plates removed, after which this plate is secured to the body or shell in the manner described.

In making safes having the back solid with the sides and with seamless corners I do not confine myself strictly to the details above set forth. Thus in forming the body of the safe, for instance, not only may the sheet of metal reach inward to the doorway in the front side, but the parts of the front side above and below the doorway may be integral with the main sheet of metal, as shown in Fig. 3. In the construction therein shown a single endless sheet of metal composes all the four sides of the body of the safe, and a piece of metal is cut from the middle of the front side to form the doorway; and another, though in some respects inferior, way of forming the ends of the safe is to make the ends of the shell by taking a bar of angle iron or steel and bending it around conforming to the shape of the shell, welding the ends to form a frame, *g*. Then, having secured a plate, B', of a like metal to one of the flanges of this frame as a panel, the end piece thus made is affixed by the other flange to the main portion or shell in the same

manner as before specified. This modification is illustrated in Fig. 4.

The foregoing improvements I propose to employ in any class of safes to which they are found applicable.

I claim as my invention—

1. A wrought-metal safe-body having the sides, back, and part of the front formed of one piece of metal, and the end plates provided with flanges, by which they are secured to the body.

2. A safe-body having the sides, back, and part of the front in one part or piece, and the ends made of flanged plates with seamless corners.

3. In a safe body or shell, the main portion consisting of the sides, back, and part of the front in one part, and end pieces having flanged margins integral therewith, whereby all the corners are made seamless throughout.

4. The combination, in a fire-proof safe or messenger-chest, of the outer body-shell, A, formed of a single sheet of metal bent around at the corners, flanged end pieces, B B, fitted over and secured to the body-shell, a suitable inner shell, and a fire-repellent filling between the outer and inner shells, substantially as set forth.

JOHN FARREL.

Witnesses:

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