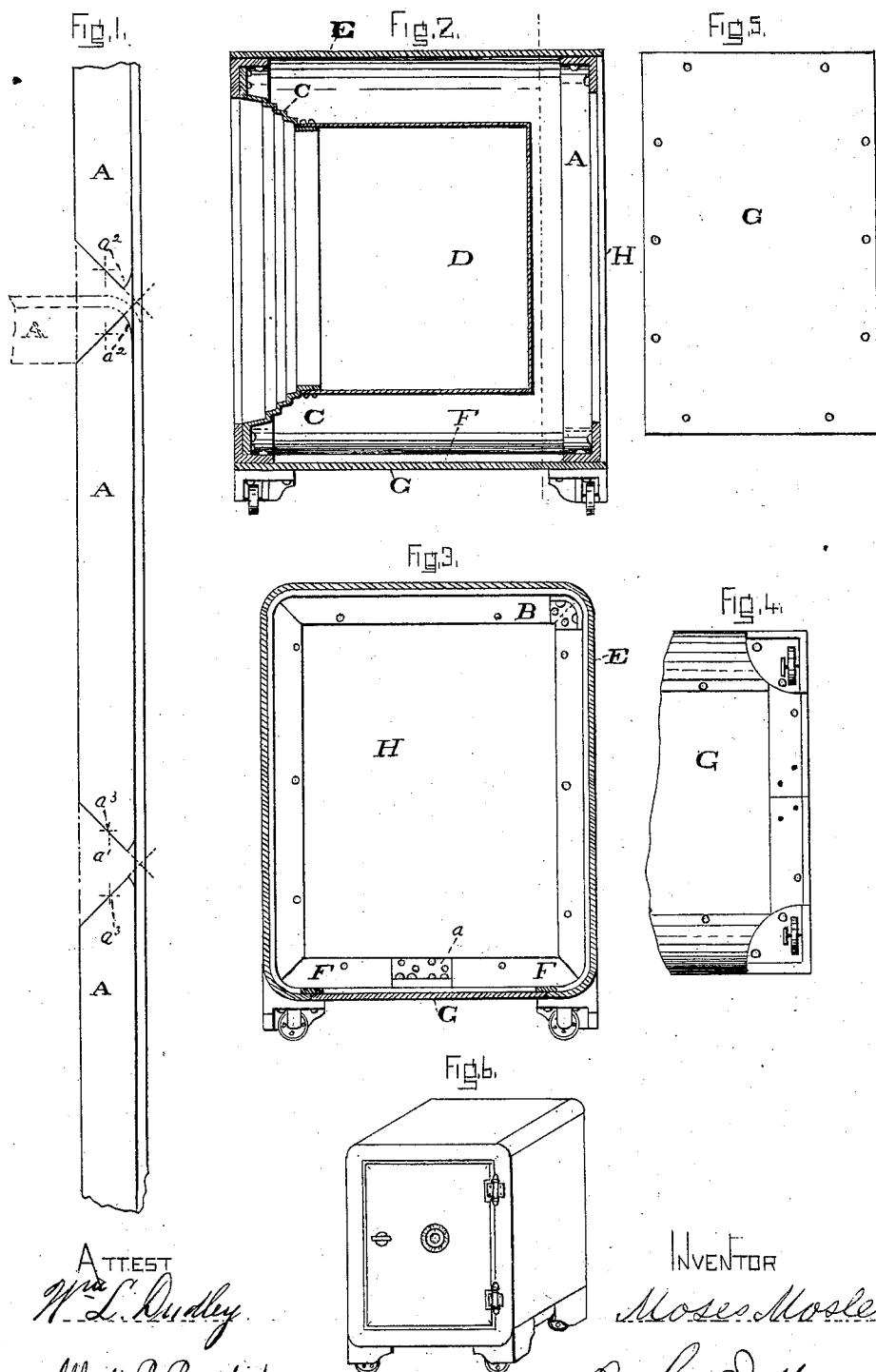


(No Model.)

M. MOSLER.
FIRE PROOF SAFE.

No. 281,640.

Patented July 17, 1883.



ATTEST
W. L. Rudley
Alfred B. Benedict

INVENTOR
Moses Mosler
By Geo. J. Murray
Atty

UNITED STATES PATENT OFFICE.

MOSES MOSLER, OF CINCINNATI, OHIO.

FIRE-PROOF SAFE.

SPECIFICATION forming part of Letters Patent No. 281,640, dated July 17, 1883.

Application filed December 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, MOSES MOSLER, of the city of Cincinnati, county of Hamilton, State of Ohio, have invented certain new and useful
5 Improvements in Safes, of which the following is a specification.

The object of my invention is to make a stronger and better safe at a much less cost than any heretofore produced. I have found
10 that a great item of expense in the manufacture of fire-proof safes (to which class of safes my invention particularly relates) is the blacksmith-work, and the consequent labor of finishing over this work on the emery-wheel upon
15 outside surfaces. By my present invention I am enabled to almost entirely dispense with this work, and at the same time make a much stronger and better safe, and one that is more easily finished, as will be seen from the following
20 description of my invention, taken in connection with the accompanying drawings, in which—

Figure 1 is a plan view of a portion of one of the angle-bars from which the frame-work
25 of my safe is made. Fig. 2 is a transverse vertical section of my improved safe. Fig. 3 is a vertical section taken in a plane at right angles to the view shown in Fig. 2 through line $x x$. Fig. 4 is a plan view of a portion of the inverted safe with bottom plate removed; Fig.
30 5, a plan view of the central bottom plate. Fig. 6 is a reduced perspective view of the completed safe.

Similar reference-letters indicate identical
35 parts in the various views.

The front and back frames of the safe are formed from the equal-sided L-shaped angle-bars A, which are bent around to the form shown in Fig. 3, and the ends united and firmly
40 held by an angle-piece, a , which overlaps the joint upon the inside, and is secured to both sides of the angle-bar by rivets. To admit of the bar A being bent to the form shown, Fig. 3, and in dotted line, Fig. 1, one of its sides is cut out, where the bends are to be made, to the
45 form shown at a' , Fig. 1. The joint-lines are angles of forty-five degrees with the opposite side of the angle-bar, the vertex of both angles being in the center of the thickness of the side to be bent. The curved ends a'' , around which
50 the side is bent, are described from points a^3 in

the miter-lines. The blank piece between these lines is punched out by a punch of suitable shape. The bend is made in a forming-press, the stationary die being the shape of the inner
55 curve of the corner, and the movable die concaved to fit the outer curve, or vice versa. By this means the miter-lines are brought together and the outer angle of the bar A, at the corners, is bent down to form a close joint with the
60 curved portions. The corner-joints are made more secure by re-enforce pieces B, made of malleable cast metal to snugly fit into the corners, and secured therein by riveting or other well-known means. One of these pieces is
65 shown secured in place in Fig. 3. The cast-metal door-frame C, with sheet-metal box D attached, is secured to the inside of the front angle-bar A in the usual manner. The sheet-metal cover E is bent around the frames formed
70 of bars A, the ends of the sheet terminating under the safe. Upon each edge of sheet E, between the angle-frames, are secured metal bars F. One-half of these bars project beyond
75 the edges of the sheet to form seats for the bottom sheet or plate, G. The sheet E projects over the rear frame the thickness of the back plate, H, the outline of which corresponds with the outline of the rear angle-frame. After the
80 frame is secured together the safe is filled through the bottom opening with fire-proof cement. The bottom is then secured in place, and the casters, which have their upper parts made to conform to the rounded corners of the
85 safe, are attached.

It will be seen that in my safe there are no joints for the filling to work through, as is the case in safes formed of the welded and paneled frames now in common use, and that the exterior being plain smooth surfaces, the safe is
90 much easier finished.

By the means above described I am enabled to use a stronger outer plate without increasing the cost, and if additional strength is required
95 an additional frame, similar to the front and back ones, may be placed centrally between them. Thus all danger of the sides or top bulging out by the filling expanding is entirely avoided.

Instead of the bottom plate, the ends of sheet
100 E may be made to meet under the bottom of the safe. In this case the safe is filled from

the back, as is now done; but the form shown is much the best, as my safe can be completely finished before the filling is put in. The filling adds greatly to the weight. Much labor in handling is therefore saved.

It would be an inferior modification of my invention to bend the bar A so as to form the top and sides of the frame, and form the bottom by a separate straight angle-bar riveted to the inwardly-projecting sides.

I am aware that it has been proposed to make protecting corner-pieces for safes from angle-iron, from one side of which a triangular piece was cut out to permit the opposite side to bend.

The shape of the cut to permit the angle-bar to be bent to form rounded corners may be varied without departing from the principles of my invention, it only being essential that sufficient metal be cut away on one side of the angle-bar to permit the other or uncut side to be bent, the cut nearest the uncut side being in the form of a curve or curves, so that when said uncut side is bent to form the corner it will bear upon and be supported by the curved end or portion of the cut, and thus be rounded by a curve similar to the curve of the cut.

What I claim as new, and desire to secure by Letters Patent, is—

1. An angle-bar for safe-frames, consisting, substantially as before set forth, of a right-angled iron bar, one of the sides of which is cut away, leaving a curve facing the uncut side, whereby said uncut side may be bent to bear upon said curve to form a rounded corner.

2. An angle-bar for safe-frames, consisting, substantially as before set forth, of a right-angled iron bar, one of the sides of which is cut away, with curved cuts meeting a right-angled cut, whereby the uncut side may be bent to form rounded corners.

3. In a safe, the combination of the front and back frames, formed of single bent angle-bars having one side cut away to leave curved ends, upon which the uncut side is bent to form rounded corners, and a metal sheet, E, bent around and secured to said frames to form the top and sides of the safe, substantially as described.

MOSES MOSLER.

Witnesses:

GEO. J. MURRAY,
M. W. OLIVER.