

L. Lillie,
Burglar-Proof Safe.
N^o 21,427. Patented, Sep. 7, 1858.

Fig. 2.

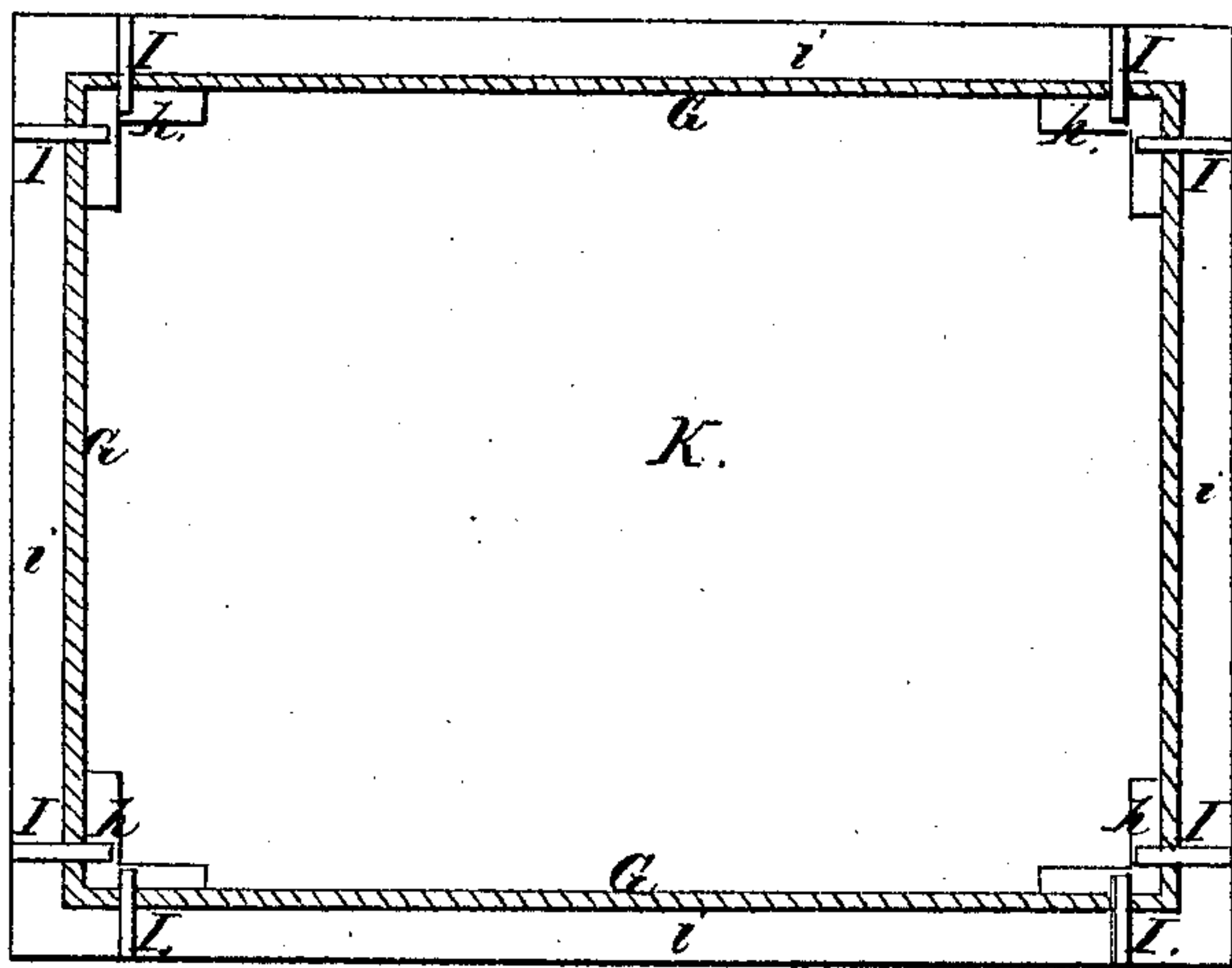
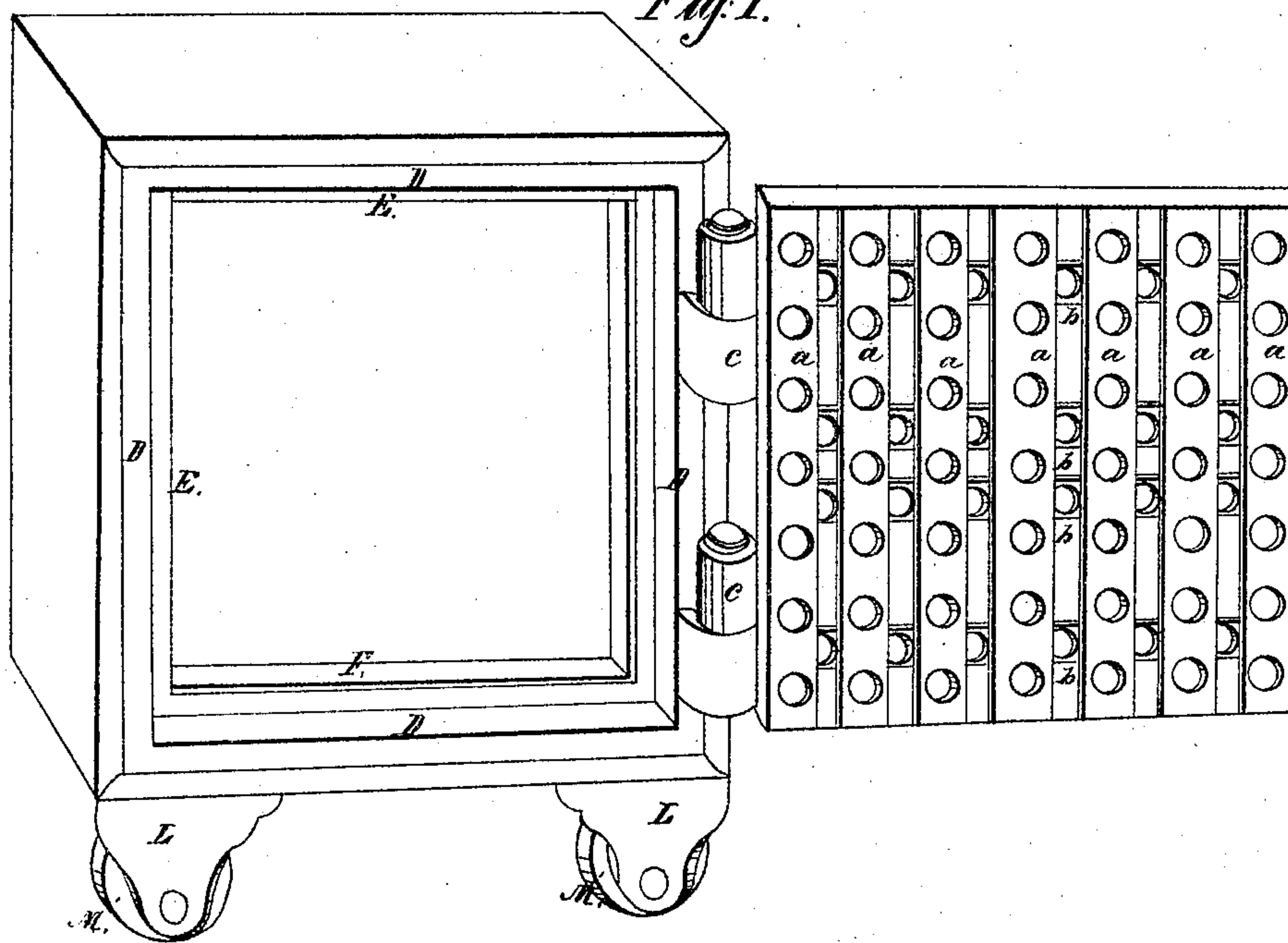


Fig. 1.



UNITED STATES PATENT OFFICE.

LEWIS LILLIE, OF TROY, NEW YORK.

IRON SAFE.

Specification of Letters Patent No. 21,427, dated September 7, 1858.

To all whom it may concern:

Be it known that I, LEWIS LILLIE, of the city of Troy, county of Rensselaer, and State of New York, have invented new and useful
5 Improvements in Cast-Iron Safes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to letters of reference marked thereupon.

10 The nature of my invention consists in making chilled cast iron safes with a wrought iron jamb cast therein for the purpose of receiving and stopping the door to the same, and rendering it more strong
15 against burglars.

It also consists in making a frame work of wrought iron bars perforated with holes, for the door, which wrought iron bars cross each other at right angles and extend to
20 the entire edge of the said door, and shut against the wrought iron jamb hereinafter described, for the purpose of preventing burglars from breaking away the immediate edge of the said door, thereby effecting an
25 entrance to the inner part of the safe aforesaid, and the said wrought iron bars are for a further purpose of making a strong foundation whereby to securely fasten a curtain safe lock which has heretofore been patented
30 to me.

It also consists in forming a frame work of wrought iron bars for the entire body of the said safe, perforated with holes for the purpose of strongly riveting the same to-
35 gether with iron at the time of casting thereof.

It further consists in making an anchor in each corner of the inside at the time of casting, which anchor is connected to the cast
40 iron body by means of holes through the ends of the wrought iron bars, which holes are filled with iron at the time of the casting of the safe, thereby firmly uniting the anchor to the outside casting and forming a strong
45 and durable corner.

To enable others to make and use my invention I will proceed to describe its construction, and the operation of casting the same.

50 Figure 1 represents the frame work of the door and enough of the safe to receive the said door. Fig. 2 represents a horizontal section of the core (K) and the manner in which the casting is performed.

55 (*a, a, &c.*), Fig. 1, are the perpendicular bars, and (*b, b, &c.*) the horizontal bars at

right angles with the perpendicular, forming a frame work for the doors. These bars contain holes as seen at the drawings, which
60 holes are for the purpose of receiving the iron at the time of casting so as to strongly rivet the same together, thereby making one solid piece of cast and wrought iron. The said bars may be constructed in the same
65 manner and entirely surrounded by cast iron, or they may be upon the inside and iron cast upon them, filling the said holes in the bars and any space between the same, thus leaving the perpendicular bars (*a, a, &c.*) plain to be seen while the horizontal
70 bars (*b, b, &c.*) are entirely covered with the cast iron except at their immediate ends. The bars (*a, a, &c.*) shut against the wrought iron jamb (E) Fig. 1. Any required number of perpendicular and horizontal bars
75 may be used. These bars may be of any required thickness, and are to serve as nuts to receive the screw bolt fastening the lock to the door. The frame work for the entire safe is made in the same way and manner
80 as represented in said door. At Fig. 2 may be seen represented one bar of the said frame work at (*c, c, c, c*) which unites at each corner, and then having holes as seen at (*I, I, &c.*) which holes connect the anchor
85 (*h*) to the main and outside casting (*i*) by means of cast iron while casting. The anchors (*b*) are made of cast iron at the same time all other cast parts are cast, and are thereby made a part of the casting, while at
90 the same time each corner of the wrought iron frame work is riveted and firmly secured and made fast, whereby each and every bar of the wrought iron frame work becomes strongly united to the cast iron part
95 thereof.

In Fig. 2 (*i, i, &c.*) represent the iron cast upon the frame work of wrought iron one bar of which is represented at (*c, c, &c.*). The dark represents the cast iron, and showing
100 therein the rivets (*I, I*) which are also cast iron and solid with the anchor and outside casting. The light part represents the frame work upon the core (K) and before the casting is done. With the core (K) and
105 the sand or box outside thereof a perfect mold is formed. The anchors (*h*) are provided for the casting in the corners of the core (K). The wrought iron frame work is laid upon the said core (K) in the form as
110 shown in the door at Fig. 1, and each and every piece thereof is fastened to the core by

a common nail passing through one or more holes into said core.

5 The wrought iron jamb (E, E, &c.), Fig. 1, is of flat bars of sufficient width and thickness and having holes perforated in the edge thereof which is covered entirely up by the cast iron, and not shown in the drawings. These holes are for the purpose of riveting and firmly uniting it to and with the main
10 cast part of the safe. The inner edge projects inward to receive the door and keep out fire or water and to support the edges of the door from the burglar's operations. (D, D, &c.), same figure, represents the recess for the door down to the jamb of wrought iron (E). F represents the continuation of the inner part of the safe,
15 (C, C) the hinges which are cast upon a wrought iron hinge, making a strong and durable hinge of wrought iron surrounded
20 by cast iron.

The frame (L, L, &c.) for the purpose of containing rollers (M, M,) are cast separate in separate parts and securely fastened to the bottom of the safe by means of the dove-
25 tail process. This is much more convenient in casting and transporting the said safe.

The operation of forming the core and of casting the safe will readily be understood by any who understand molding and casting.
30

Having thus described my invention what I claim and desire to secure by Letters Patent is—

I claim the mode of forming the corners of a safe with anchors, *h, h, h, h*, also, the
35 jamb E, as and for the purposes herein described and set forth.

LEWIS LILLIE.

Witnesses:

EDW. F. BROWN,
MARCUS P. NORTON.