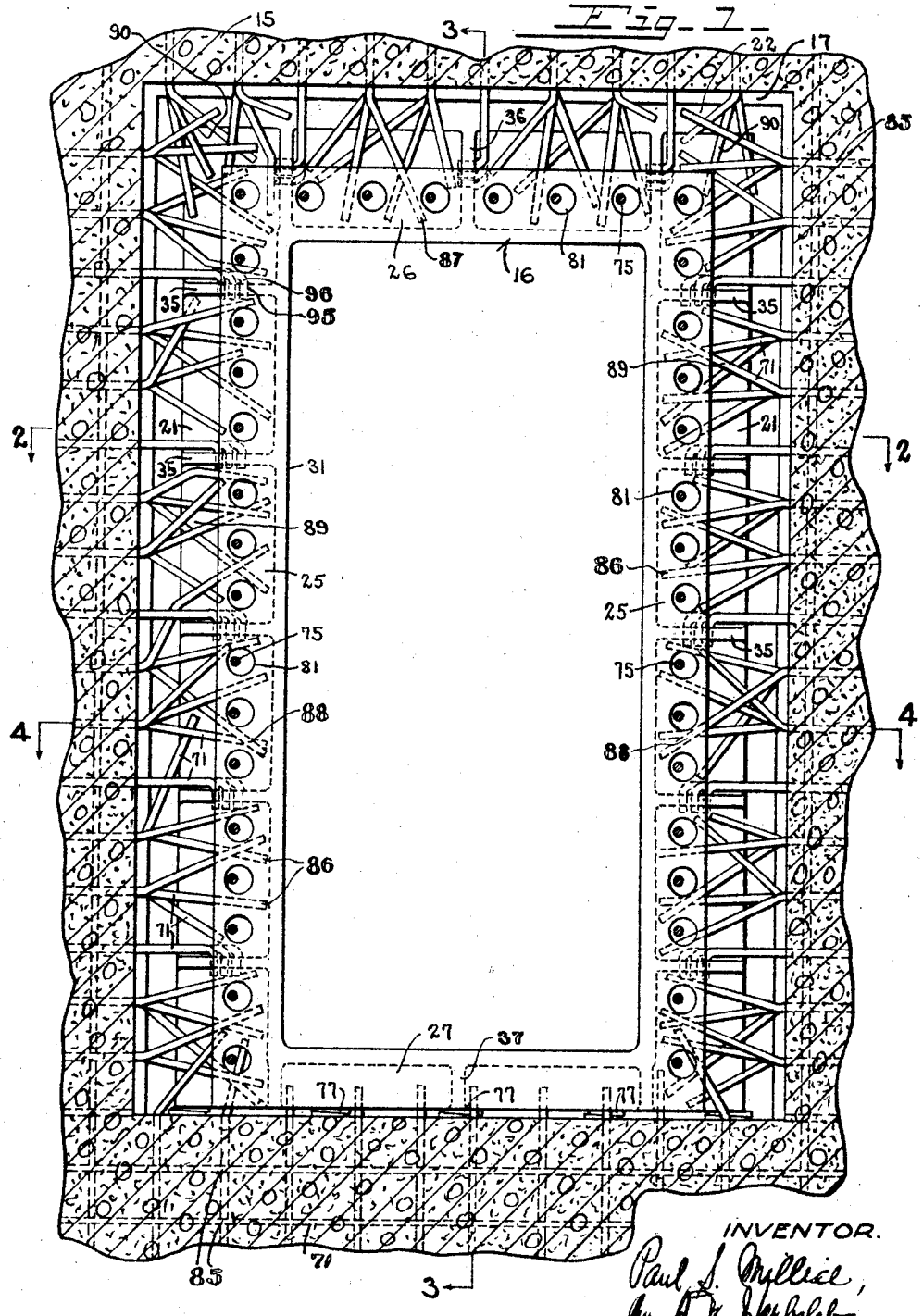
Sept. 13, 1927. 1,642,552

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SAFE VAULT

Filed March 2, 1925 5 Sheets-Sheet 1

Fig. 1



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SAFE VAULT

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Fig. 2.

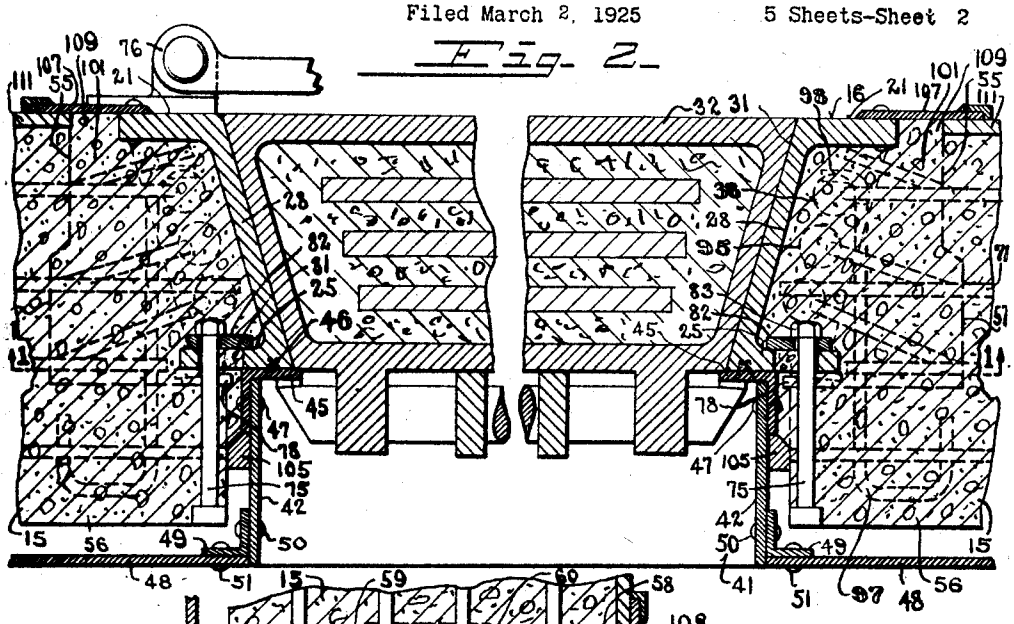
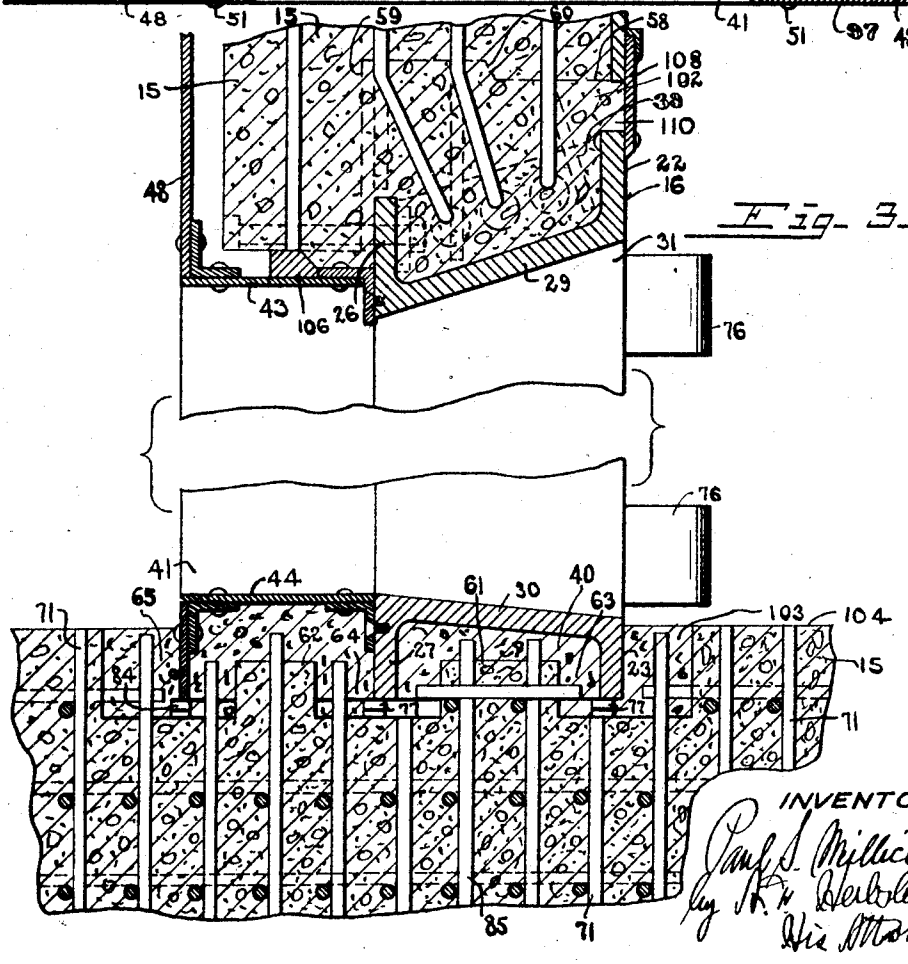


Fig. 3.



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SAFE VAULT

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Fig. 4.

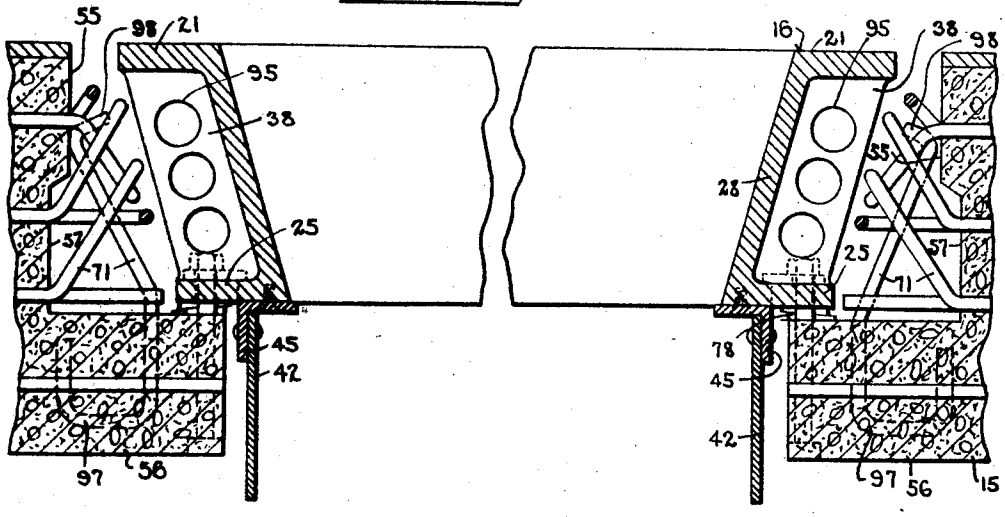


Fig. 10.

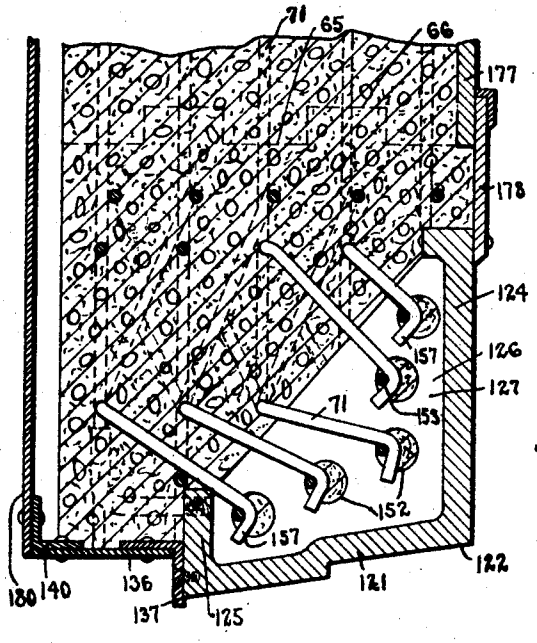
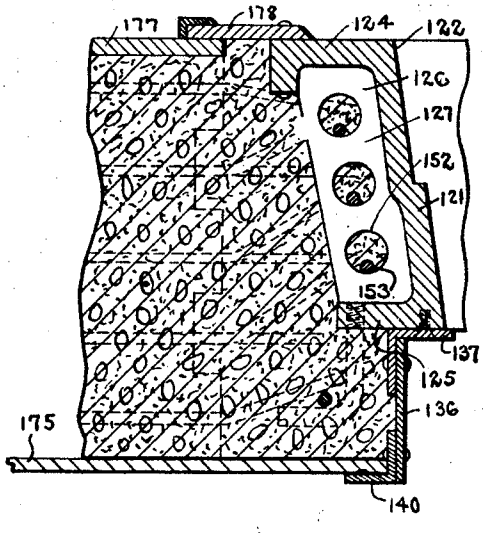


Fig. 11.



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SAFE VAULT

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Fig. 6.

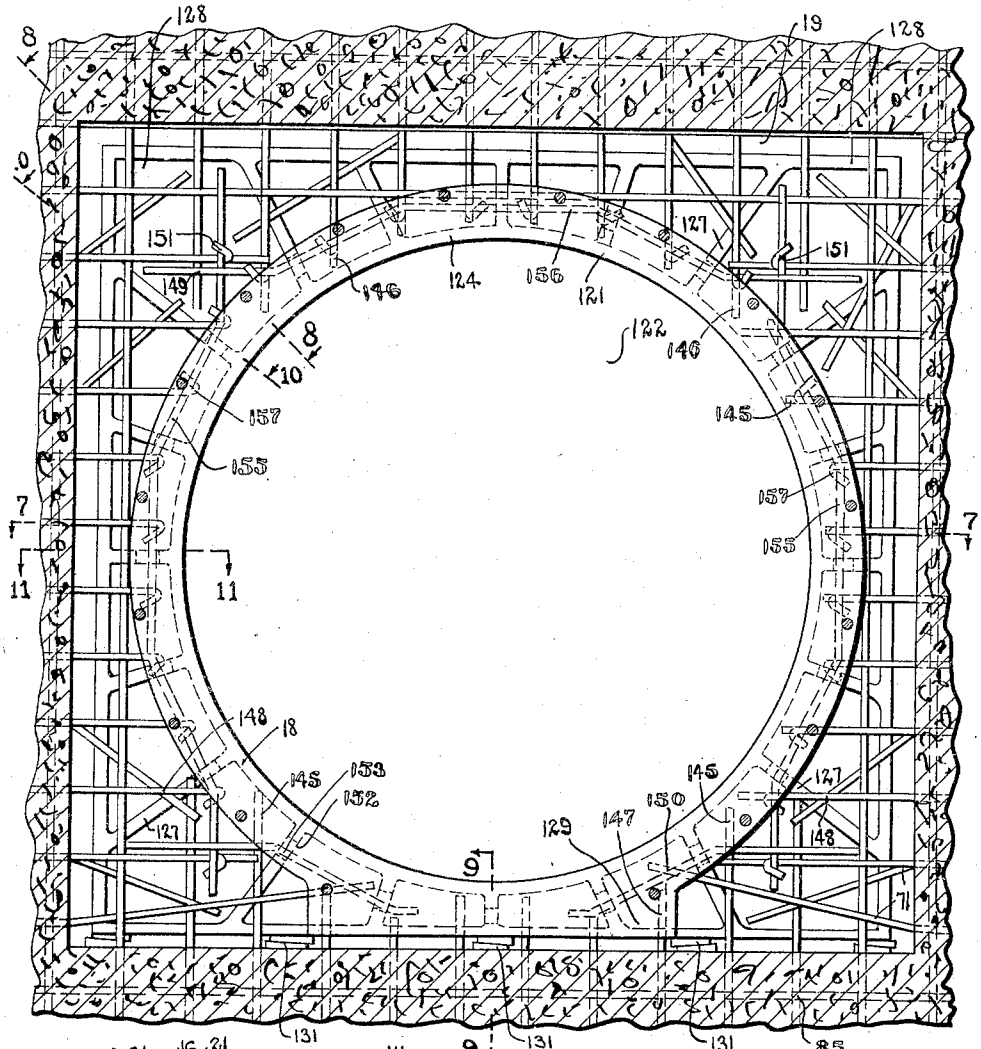
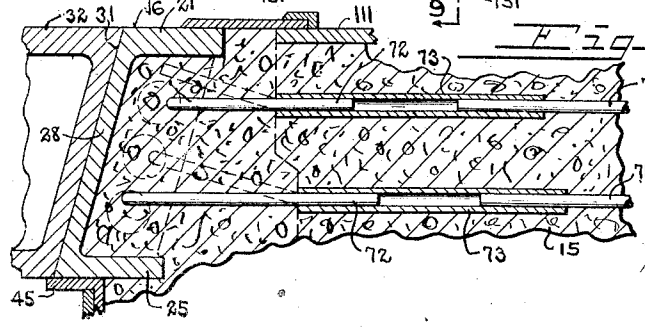


Fig. 5.



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Fig. 7.

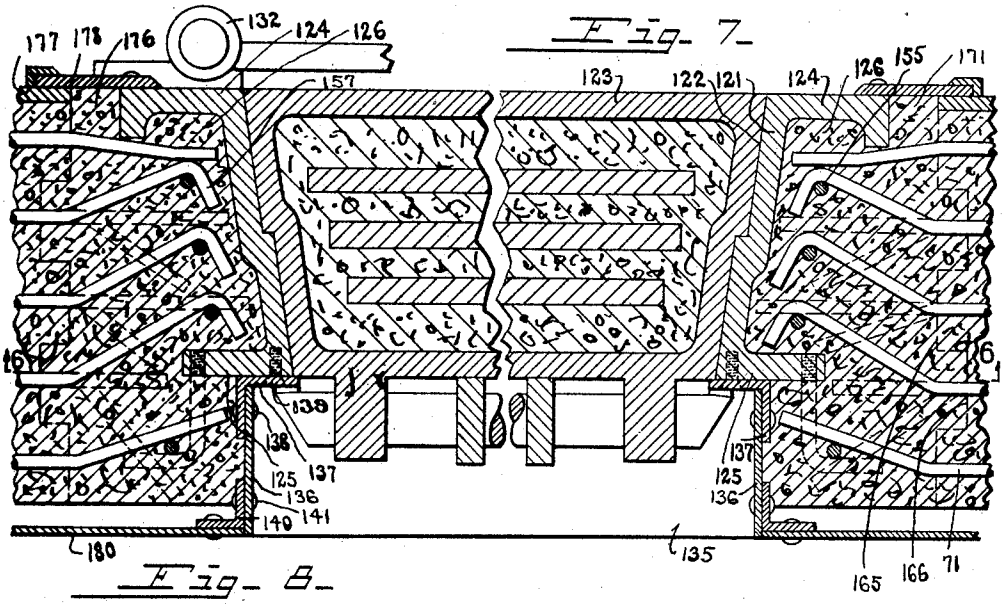


Fig. 8.

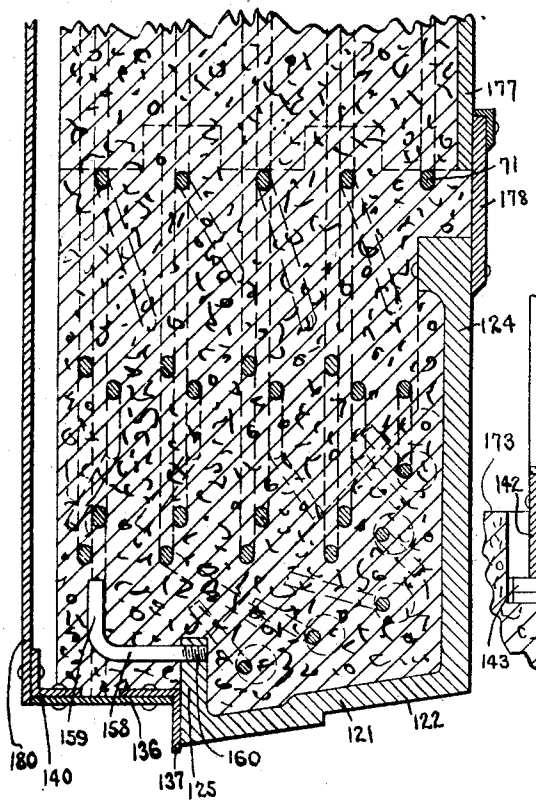
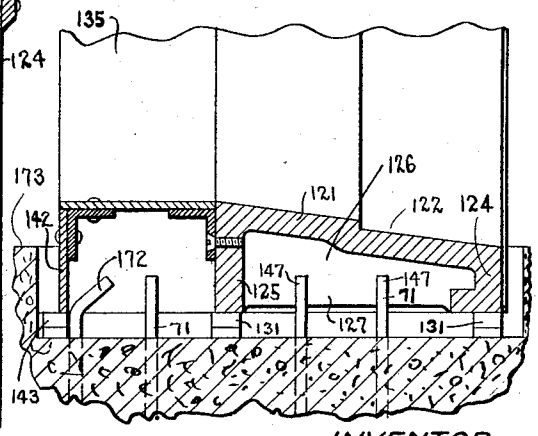


Fig. 9.



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Patented Sept. 13, 1927. 1,642,552

UNITED STATES PATENT OFFICE.

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SAFE VAULT.

Application filed March 2, 1925. Serial No. 12,622.

My invention relates particularly to burglar proof safe vaults.

It is the object of my invention to provide a safe vault in which the door framing and the wall of the safe vault are securely connected by novel means; further, to provide an interlacing between the reinforce bars of the reinforced concrete wall of a safe vault and the structure of the door framing; further, to so construct and connect the door framing and the wall of the safe vault whereby all spaces about the wall of the door opening are avoided; further, to provide the door framing with a plurality of flanges about the same forming space about the door framing between said flanges, and to extend the reinforced concrete wall of the safe vault into said space, for locking the door framing with said wall; and, further, to connect the reinforce bars with said door framing and imbed said connections in concrete for rigid positioning of said door framing.

It is the object of my invention, further, to construct a reinforced wall for a safe vault and provide the same with an opening for a door framing and provide a door framing received in said opening, the wall of said opening and the outer periphery of the wall of the door opening in said door framing provided with locking parts, and to insert a concrete filling between said walls to interconnect said locking parts.

The invention will be further readily understood from the following description and claims, and from the drawings in which latter:

Fig. 1 is a vertical section of my improvement as applied to a rectangular door, taken in the plane of the line 1—1 of Fig. 2, the reinforce bars of the reinforced concrete wall being shown bent into locking relation with the door framing and prior to the pouring of the intermediate concrete section about said ends, and parts being partly broken away.

Fig. 2 is a horizontal section of the same, partly broken away, taken in the plane of the line 2—2 of Fig. 1, but showing the intermediate concrete section poured.

Fig. 3 is a vertical cross-section of the same, partly broken away, taken in the plane of the line 3—3 of Fig. 1, showing the intermediate concrete sections at the top and bottom of the door framing poured.

Fig. 4 is a horizontal cross-section of the same, taken in the plane of the line 4—4 of Fig. 1, partly broken away, showing the ends of the reinforce bars of the reinforced concrete wall positioned so that the door framing is received into the framing opening in a direction transverse to said wall, with the door framing held in place ready for lockingly positioning the ends of said reinforce bars with relation to said door framing.

Fig. 5 is a horizontal section showing a modification of the reinforcing means between the wall of the framing opening and the door framing.

Fig. 6 is a vertical section, taken in the plane of the line 6—6 of Fig. 7, showing a reinforced concrete wall of a safe vault provided with a framing opening, and a door framing for a round door positioned in said opening, with the projecting ends of the reinforce bars of the concrete wall connected with said door framing, ready for having the intermediate concrete section poured thereabout.

Fig. 7 is a horizontal cross-section of the same, taken in the plane of the line 7—7 of Fig. 6, partly broken away, and showing said intermediate concrete section poured.

Fig. 8 is a diagonal cross-section, taken through the corner of the door framing, in the plane of the line 8—8 of Fig. 6, showing the connection between the door framing and the reinforced concrete wall in finished state.

Fig. 9 is a vertical cross-section, taken in the plane of the line 9—9 of Fig. 6, showing the door framing positioned, and showing the space between the bottom of the door framing and the lower wall of the opening in the reinforced concrete, with the ends of the locking bars in position in said space, for having the intermediate concrete section poured thereabout into said space.

Fig. 10 is a diagonal cross-section, taken in the plane of the line 10—10 of Fig. 6, and showing the interlocking connections between the reinforced concrete wall and the door framing in finished form; and,

Fig. 11 is a horizontal cross-section of the same, taken in the plane of the line 11—11 of Fig. 6, and showing the rear dam for the intermediate concrete section in position.

In employing my invention, a main reinforced concrete wall is preferably initially constructed by employment of the usual forms between which the concrete is poured

in usual manner, the floor and top of the safe vault being also formed of reinforced concrete in usual manner, for forming the compartment or room for the safe vault. The opening for the door framing is, however, formed in different manner from that heretofore usually employed, when the door framing is inserted into the main wall after the latter has been formed.

I have in the drawings exemplified my invention as applied to a so-called rectangular door structure in Figs. 1 to 4 inclusive, and to a so-called round door structure in Figs. 6 to 11 inclusive, although the parts and arrangements shown in connection with one form of door structure may be used for the other form of door structure.

The reinforced concrete wall of the safe vault in which the door opening for the door framing is formed is exemplified at 15, the opening therein for a rectangular door framing 16 being shown at 17, and the opening for a round door framing 18 being shown at 19. The wall of this opening may be formed by pouring the concrete against suitable molds through which the reinforce bars extend into said opening. The wall 15 is one of the main walls of the safe vault.

It is understood that by the term concrete, wherever employed herein, any suitable concrete is intended, the usual concrete employed being a mixture of cement, sand, crushed rock, gravel or other ingredients, as may be desired.

The door framings are made of suitable metal, being preferably integral steel castings, and are at their outer lateral peripheries provided with suitable projections and recesses. The term lateral is, in the description and in the appended claims, used to designate the top and bottom parts as well as the side parts at and adjacent to the outer periphery of the door framing.

Thus the rectangular door framing is provided with front lateral flanges 21, 22, 23, the flanges 21 extending sidewardly, (see Figs. 1, 2 and 4), and the flanges 22 and 23 extending respectively upwardly and downwardly, (see Figs. 1 and 3).

The rectangular door framing is also provided with rear lateral flanges 25, 26 and 27, the rear lateral flanges 25 extending sidewardly, (see Figs. 1, 2 and 4), and the rear lateral flanges 26 and 27 extending respectively upwardly and downwardly, (see Figs. 1 and 3).

These lateral flanges extend laterally outwardly from the wall 28, 29, 30, of the door opening 31, which receives the door 32, which latter is swung on suitable hinges, parts of which are on the door and door framing respectively.

Laterally extending ribs 35, 36 and 37, extend laterally outwardly from the walls of the door opening, in the recesses 38, 39, 40, between the front flanges and the rear flanges, and reinforce the entire door framing structure.

The door framing is preferably formed as an integral metal casting, and its depth is in practice substantially like the thickness of the door. There is a usual door-joint between the door framing and the door, the complemental faces of which are respectively on said door framing and said door. A vestibule 41 extends inwardly from the door framing, and is exemplified as comprising sheet metal lateral walls, 42, 43, 44, of which the walls 42 are the side walls and the walls 43 and 44 respectively the top and bottom walls. These walls are secured to the door framing by means of angle irons 45, one of the wings of which is secured to the rear face of the door framing, as by screws 46, and the other wing of which has the lateral walls of the vestibule secured thereto, as by rivets 47. The inside lining of the safe vault usually extends from the vestibule. This lining is exemplified as the sheet metal wall 48, which is secured to the vestibule in suitable manner, as by means of angle irons 49 secured in place, as by rivets 50, 51. Other arrangements may be employed.

In employing my invention, the wall of the framing opening, if preformed, is provided with lateral projections and recesses, exemplified in Figs. 1 to 4, inclusive, as lateral projections 55, 56, and a lateral recess 57, at the side walls of the framing opening, similar projections 58, 59, and a similar recess 60 at the top of the wall of the framing opening, and projections 61, 62, and recesses 63, 64, 65, at the bottom of the framing opening.

The reinforced concrete wall of the safe vault has reinforce bars, shown generally at 71, which are initially so placed as to permit the reception of the door framing into the opening therefor, as exemplified for instance in Fig. 4, in which the ends of the reinforce bars are bent back for providing the proper space for placement of the door framing, and as exemplified in Fig. 5, in which obstructing bars 72 are shown as slidable endwise in tubes 73 imbedded in the concrete wall of a safe vault, and arranged to be axially moved in said tubes into obstructing relations with the door framing. These tubes are preferably metal tubes forming part of the reinforcement of the concrete wall. The endwise movable rods and tubes may be arranged about the sides and top of the framing.

When the door framing is set in place, it may have the vestibule attached thereto, or, if desired, the framing may be set in place and the vestibule afterwards attached thereto. The rear lateral projections 56 have bolts 75 imbedded therein, the threaded ends of which extend forwardly.

The door framing is positioned in proper height and in proper position with relation to the plane of the front wall of the safe vault, and for having the proper level so that the door or doors, hinged thereto in usual manner, as from hinges indicated at 76, may swing properly. This positioning and leveling of the door framing may be obtained by means of wedges 77, at the bottom of the door framing and wedges 78 placed at suitable positions at various places in the height of the opening between the rear face of the door framing and the front face of the lateral projections 56. The wedges are preferably of steel.

The rear flange of the door framing is shown provided with holes 81, through which the bolts 75 respectively project. The holes are shown substantially larger than the diameters of the bolts so that material shifting of the door framing may take place with relation to the framing opening, in order to avoid the necessity of extreme accuracy in the placing of these bolts in the concrete wall. Washers 82 are received about the bolts, and nuts 83 are threaded to the bolts for drawing the door framing toward the rear lateral projections of the wall of the opening and the wedges between said door framing and said projections, the wedges and nuts being manipulated for proper inward and outward positioning of the door framing. When the door framing has been properly positioned and leveled, the nuts will have been drawn up tight for fixing the position of the door framing with relation to its opening.

In positioning the vestibule for attachment to the door framing after the door framing has been positioned, or for aiding in positioning the combined door framing and vestibule when they are positioned in attached relation, wedges 84 may be employed for leveling the vestibule or aiding in leveling the combined door framing and vestibule.

The ends of the rods are arranged to be placed into obstructing relation with the door framing. In the exemplification shown in Fig. 4, in which the ends of the rods are shown bent back to provide space for the reception of the door framing, the rods are, when the door framing is in place, bent toward the door framing, as by employment of suitable tools, into relations, for instance, shown in Figs. 1 to 3 inclusive.

It will be understood that when forming a reinforced concrete wall of this character, the reinforce rods are placed substantially close together and are crossingly arranged, as at 85, in the concrete, and extend for instance in horizontal and in vertical directions, and that there may be a plurality of the reinforce rods one in rear of the other in each layer and stand of the rods, the term layers being applied to the substantially horizontally arranged rods, and the term stand being applied to the rods extending up and down.

The projecting ends of the reinforce rods projecting into the opening for the door framing may be placed or bent in various directions into obstructing relation with the door framing between the front and rear flanges thereof and between the ribs thereof, as exemplified at 86, 87, and may also be crossingly arranged with relation to each other, as exemplified for instance at 88, 89, 90, in Figs. 1, 2 and 3.

The ribs 35, 36, 37, may be provided with holes 95, and certain of the rod ends may be bent, as shown at 96, for forming hook ends received in said holes. Other arrangements of connections and interference with the door framing may be employed, exemplifications of which are shown in the drawings.

In setting the door framing in place, it is usually tilted upwardly and rearwardly from the front so that the bottom recess 40 thereof is received over the upward projection 61 and its rod ends in the bottom wall of the opening. When the vestibule is in attached relation with the door framing, the vestibule is tilted over the upward projection 62 and its rod ends.

Additional reinforce rods 97 may be imbedded in the lateral projections 56 and extend forwardly and be provided with hook ends 98, the forwardly projecting portions and hook ends of these reinforce rods being bent laterally toward the door framing into obstructing relation therewith.

If desired, these endwise movable rods 72 may also be bent and certain of the same may also be provided with hooks in similar relation to the rods exemplified in the balance of the drawings.

When the door framing has been positioned, the vestibule may be secured thereto as shown in Fig. 4, or said vestibule may be in attached relation with the door framing when the latter is placed in the opening.

The space between the wall of the framing opening and the door framing and preferably part of the space between said wall and the vestibule is filled with concrete, thereby binding the wall of the safe vault, the reinforcing means and the door framing securely together, and providing a solid backing for the door framing at the framing opening and adjacent thereto, by an after poured concrete section or filling, to resist distortion of the door framing by explosive charges, hammer and other blows, and attempts at entry into the safe vault. This backing for the wall of the door opening preferably extends throughout the depth of the door. It is exemplified at 101, 102, 103, and has projections and recesses which mate and unite with the walls of the recesses and projections in the wall of the framing opening and

the peripheries of the framing and vestibule. The after poured concrete section preferably becomes an integral part of the original reinforced concrete wall.

If desired, the door framing may be set in place and the reinforced concrete wall built about it, so as to have the reinforcing of the wall received in lateral recesses in the door framing and in obstructing relation thereto to resist transverse displacement of the framing and entrance or piercing along its edges.

The concrete may be poured in wet state and be suitably forced into all of the cavities, shown for instance at the bottom of Fig. 3, level with the floor 104. Suitable dams may be provided for the sides and top of the door framing for confining the concrete, as exemplified for instance by the dams 105 in Fig. 2 and the dam 106 in Fig. 3 at the rear of the top of the door framing, and by plates in the positions of the finishing plates 107 at the sides of the front of the door framing, and the finishing plate 108 at the top of the front of the door framing, these damming plates being provided of progressively suitable heights for receiving the concrete poured into the space between the wall of the framing opening and the door framing and permitting the insertion of suitable instruments for tamping the concrete so as to fill all the recesses between the door framing and the wall of the opening, and about the ends of the reinforcing means and the connections thereof, similar provision being made at the top of the door framing. The finishing plates are suitably secured in position and cover the spaces 109, 110, left between the front face of the door framing and the front face of the outer metal plates 111 of the safe vault, through which the tamping tools are introduced.

Referring now to Figs. 6 to 11 inclusive, exemplifying a round door structure, the round door framing is provided with a wall 121, shown as a stepped wall, having an opening 122, for the round door 123 of suitable construction. There is a usual door-joint between the door framing and the door, the complemental faces of which are respectively on said door framing and said door. This framing, like the door framing for the rectangular door, is also provided with projections and recesses at its lateral portions, exemplified as front flanges 124 and rear flanges 125, having a recess 126 therebetween, ribs 127 extending between said flanges and integral therewith and with the wall of the door opening.

The front flange is exemplified as extended into square form, to form corners 128, and the lower part of the rear flange is extended horizontally to form a support 129. The opening 19 for the door framing in the wall of the safe vault is also shown square.

The ends of reinforce bars, similar to those shown in Figs. 1 to 4 inclusive and in Fig. 5 with relation to rectangular doors, may also be employed in connection with the round door framing, the reinforce bars and their arrangements being designated by similar reference numerals.

The ends of the bars, when the bars are fixed in the previously poured concrete wall, are bent sufficiently out of the way of the door framing, to permit the round door framing to be placed in position in its opening, as by tilting it into its opening from the front of the wall, similarly to the bending of the ends of the reinforce rods shown in Fig. 4, but conforming to the shape of the structure for the round door framing, or the axially shiftable rods, when these are employed, are shifted laterally away from the door framing so as to provide space for the positioning of the door framing, and the door framing and vestibule, when these are inserted in assembled relation.

The door framing is set in place in its opening and is positioned and leveled by means of wedges 131, employed in suitable locations along the length of the door framing and at the front and the rear flanges thereof, so as to position the framing in correct position with relation to the wall of the safe vault and to properly level the same for proper swinging and manipulation of the round door upon its hinges and supporting members of suitable construction when the same is in place. Parts of the hinges are indicated at 132.

When employing a round door, it is also preferably provided with a vestibule 135, exemplified as comprising a sheet metal plate 136 extending around the door opening in the door framing at the rear of the door framing, and secured to the door framing by means of an angle iron 137, one wing of which is fixed to the plate 136, as by rivets 138, and the other wing of which is secured to the rear face of the door framing, as by screws 139. This vestibule is also arranged to have a rear angle iron 140 secured thereto as by rivets 141, and may have a bottom plate 142 fixed to the angle iron at the bottom of the vestibule, under which wedges 143 may be employed for leveling the vestibule, or the combined door framing and vestibule, when these are positioned in assembled relation.

Fig. 6 exemplifies the door framing in position in its opening ready for having the concrete filling poured thereabout. It will be noted from this figure and from Figs. 7 to 11 inclusive, that the ends of the reinforce rods extend into transversely obstructing relation with the door framing, and between the front and rear flanges thereof, and between the ribs thereof, as at 145, 146, 147, and into obstructing relation with each

other in various directions, some of the same being crossingly arranged, as at 148, 149, 150, others of them interlocking as at 151, and some being received in apertures 152, in the ribs 127, as at 153.

Reinforce rods 155, 156, may also be passed through a series of the holes in the ribs at the outer lateral peripheries of the door framing and have certain of the reinforce rods hooked thereabout, as by means of hooks 157. Rearwardly extending rods 158 provided with bent ends 159, may also be secured to the door framing, as by being threaded in threaded holes 160 in the rear flanges of said door framing.

Other manners of interconnecting the door framing with the reinforce rods and for placing reinforce rods in obstructing relations with the door framing may be employed, the instances shown through the drawings being exemplifications and not intended to include all of the various manners in which the interrelations may be obtained.

When the door framing has been properly placed and the reinforce rods properly placed in relation therewith, the space between the wall of the framing opening and the door framing is filled with concrete, preferably in wet form for filling said space and binding together said wall and said door framing and the reinforce rods and securing connections.

The wall of the framing opening, when employing a round door, is also preferably provided with projections and recesses as exemplified by the lateral projections 165 and the recesses 166. The after poured concrete section 171 has projections and recesses which interlock with the walls of the recesses and projections in the wall of the framing opening and in said framing, and mate and unite with said walls and projections and reinforce rods. The after poured concrete section or filling preferably becomes an integral part of the original reinforced concrete wall.

After the parts have been positioned in assembled relation, concrete in wet form is poured and forced into the spaces and cavities at the lower portion of the door framing and vestibule and about the upwardly projecting rod ends 147, 172, (see Figs. 7 and 9), and adjacent to the floor 173 of the safe vault for filling all said spaces and recesses.

The pouring of the concrete progresses upwardly, suitable dams being placed at the front face and rear face of the opening for confining the concrete within its proper limits, in the plane of the reinforced concrete wall and the door framing and vestibule, and for the employement of suitable instruments for tamping and forcing the concrete into all spaces and into proper union with the wall of the opening, the outer lateral periphery of the door framing and the reinforce rods, and their connections.

This dam may comprise suitable plates, exemplified for instance by a plate 175 in Fig. 11, at the rear of the wall of the opening and the vestibule, suitably held in position, and by suitable plates to progressively close the front space 176 between the front face of the door framing and the metal plate 177 at the front face of the wall of the safe vault, which latter plates may be in the positions of the finishing plates 178, the space above the door framing being similarly filled, and as more fully described in relation to the rectangular door shown in Figs. 1 to 4.

When the concrete has set, the damming plates 175 may be removed and finishing plates 180 at the inside of the safe vault placed in position, as by securing the same to the angle irons 140 in suitable manner.

It is understood that the respective doors and walls of the door openings are provided with suitable locking means usual in safe vault structures, and that the respective doors are provided with suitable hanging means, not more particularly shown because well known.

In my improved structure and method, the wall of the door opening, against which the door is received when closed, has lateral flanges of substantial extent extending directly therefrom, thereby substantially strengthening said wall, and said wall is directly backed by the reinforced concrete, with the reinforcing means in the lateral outer recesses of said door framing, so that outward lateral forcing of the wall of the door opening is effectively resisted, and danger of piercing of the reinforced filling alongside said wall is removed. Furthermore, the wide flanges at the corners usual in round door structures are effectively backed and protected by the reinforced concrete, and the reinforced concrete wall is effectively tied to the door framing.

It is obvious that changes in construction and arrangements of the parts herein shown and described may be made, and that the original reinforced concrete wall of the safe vault may be formed about the door framing, without departing from my invention embraced in the appended claims.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. A safe vault comprising a main reinforced concrete wall including reinforce rods, a door framing including the wall of a door opening and a flange extending outwardly laterally from the front part of said last-named wall, the inner face of said last-named wall forming one of the faces of the door-joint, the said reinforce rods comprising portions which are located in said main

concrete wall laterally outwardly beyond said flange and portions which are in the transverse plane of said flange, said two-named portions of said respective rods being integral with each other, and said main reinforced concrete wall having a reinforced concrete extension in which said second-named portions of said reinforce rods are located as reinforcings therein, said reinforced concrete extension located in the transverse plane of said laterally extending flange and forming a backing for said wall of said door opening resisting outward spread of said wall of said door opening.

2. A safe vault comprising a main reinforced concrete wall including reinforce rods, a door framing including the wall of a door opening and flanges extending outwardly laterally respectively from the front part and at the rear part of said last-named wall forming a recess which is open in lateral outward direction, the inner face of said last-named wall forming one of the faces of the door-joint, the said reinforce rods comprising portions which are located in said main concrete wall laterally outwardly beyond said flanges and portions which are within said recess between said flanges, said two-named portions of said respective rods being integral with each other, and said main reinforced concrete wall having a reinforced concrete extension in which said second-named portions of said reinforce rods are located as reinforcings therein, said reinforced concrete extension located in said recess between said laterally extending flanges and forming a backing for said wall of said door opening resisting outward spread of said wall of said door opening.

3. A safe vault comprising a main reinforced concrete wall including reinforce rods, a door framing including the wall of a door opening, flanges extending outwardly laterally respectively from the front part and at the rear part of said last-named wall forming a recess which is open in lateral outward direction, and cross-ribs in said recess connecting with said wall and said flanges, said ribs provided with openings, the inner face of said last-named wall forming one of the faces of the door-joint, the said reinforce rods comprising portions which are located in said main concrete wall laterally outwardly beyond said flanges and portions which are received within said openings in said ribs and within said recess between said flanges, said two-named portions of said respective rods being integral with each other, and said main reinforced concrete wall having a reinforced concrete extension in which said second-named portions of said reinforce rods are located as reinforcings therein, said reinforced concrete extension located in said recess between said laterally extending flanges and forming a backing for said wall of said door opening resisting outward spread of said wall of said door opening.

4. In a safe vault, the combination of a structure comprising a door framing and a vestibule fixed thereto, said door framing provided with a laterally opening recess whose inner wall forms the wall of the door-opening and has an inner face which forms one of the faces of the door-joint, a preformed reinforced concrete wall provided with an opening in which said structure is located, the wall of said last-named opening spaced from said structure, reinforce rods having portions extending integrally from said preformed reinforced concrete wall in said space toward said structure and into said recess, and an after-poured filling of concrete in said space and about said extending portions of said rods.

5. In a safe vault, the combination of a door framing provided with front and rear flanges forming a peripheral recess and ribs between said flanges in said recess and holes in said ribs, a reinforced concrete wall comprising reinforce rods extending into said recess and reinforce rods having connections with the holes in said flanges and a filling of concrete about the outer lateral periphery of said door framing extending between said flanges and about said ribs, rods and connections.

6. In a safe vault, the combination of a preformed reinforced wall provided with an opening for a door framing, a door framing in said opening comprising a wall whose inner face forms one of the faces of the door-joint and which wall has an outwardly laterally extending part, reinforce means between the wall of said opening and said door framing having portions extending into the transverse margins of said wall of said opening and into the transverse plane of said laterally outwardly extending part of said wall of said door framing, and a wet filling of concrete between said wall of said door opening and said door framing about said laterally extending part of said wall of said door-framing and said reinforce means, which when set forms a backing for said door framing resisting outward spread of said door framing.

7. In a safe vault, the combination of a reinforced concrete wall provided with an opening for a door framing, a door framing in said opening, levelling means for said door framing, means for holding said door framing in leveled position, reinforce rods extending from the wall of said door opening toward said door framing, and a filling of concrete between said wall of said door opening and said door framing extending about and inclosing said reinforce rods.

8. In a safe vault, the combination of a reinforced concrete wall provided with an opening for a door framing, a door framing

in said opening, means for leveling said door framing, adjusting means between said door framing and said wall of said door opening for holding said door framing in leveled position, reinforce means extending between the wall of said door opening and said door framing in the space between said wall and said door framing, and a filling of concrete between said wall of said door opening and said door framing extending about and inclosing said reinforce means.

9. In a safe vault, the combination of a reinforced concrete wall provided with an opening for a door framing, a door framing comprising ribs in said opening, reinforce rods extending from the wall of said opening toward said door framing, reinforce rods extending from the wall of said opening and provided with the connecting means for said ribs, and a filling of concrete between said wall of said door opening and said door framing extending about and inclosing said reinforcing rods, said connecting means and said ribs.

10. In a safe vault, the combination of a reinforced concrete wall provided with an opening for a door framing, a door framing in said opening comprising flanges at its front and rear, leveling means for said door framing, means for holding said door framing in leveled position, reinforce rods extending from the wall of said door opening into the space between said flanges, and a filling of concrete between said wall of said door opening and said door framing extending into said space and about said reinforce rods.

11. In a safe vault, the combination of a reinforced concrete wall provided with an opening for a door framing, a door framing comprising a front flange and a rear flange in said opening, means for leveling said door framing, adjusting means between said rear flange and said wall of said door opening for holding said door framing in leveled position, reinforce means extending between the wall of said door opening and said door framing in the space between said flanges, and a filling of concrete between said wall of said door opening and said door framing extending into said space and about said reinforce means.

12. In a safe vault, the combination of a reinforced concrete wall provided with an opening for a door framing, a door framing comprising front and rear flanges and ribs therebetween in said opening, reinforce rods extending from the wall of said opening into the space between said flanges, reinforce rods extending from the wall of said opening and provided with connecting means for said ribs, and a filling of concrete between said wall of said door opening and said door framing extending into the space between said flanges and about said reinforce rods, said connecting means and said ribs.

13. In a safe vault, the combination of a reinforced concrete wall provided with an opening for a door framing, a door framing in said opening, reinforce rods in said wall, rods in said door framing complemental to said reinforce rods, means connecting said last-named rods and said reinforce rods, and a filling of concrete between said wall of said door opening and said door framing about and enclosing said rods and said connecting means.

14. In a safe vault, the combination of a door framing, a reinforced concrete wall provided with an opening for said door framing, said door framing and the wall of said opening each provided with recesses, reinforce means between said last-named wall and said door framing, and a wet concrete filling between said last-named wall and said door framing about and enclosing said reinforce means and extending into said recesses, said concrete when set locking said concrete wall and said door framing together in transverse relation.

15. In a safe vault, the combination of a door framing, a reinforced concrete wall provided with an opening for said door framing, said door framing and the wall of said opening having projections extending laterally therefrom, reinforce means between said last named wall and said door framing, and a wet concrete filling between said wall of said door opening and said door framing about and enclosing said reinforce means and said projections, said concrete when set transversely locking said door framing in said reinforced concrete wall.

16. In a safe vault, the combination of a door framing, a reinforced concrete wall provided with an opening for said door framing, reinforce means extending between the wall of said opening and said door framing, and a wet concrete filling between said wall of said door opening and said door framing about and enclosing said reinforce means, said last-named wall and said door framing having projection and recess connections with said concrete filling for transverse locking of said door framing in said reinforced concrete wall when the latter is set.

In testimony whereof, I have hereunto signed my name.

PAUL S. MILLICE.