Oct. 30, 1923. 1,472,174

D. D. HUGHES

CONCRETE BUILDING FORM

Filed Jan. 31, 1921

Fig. 1.

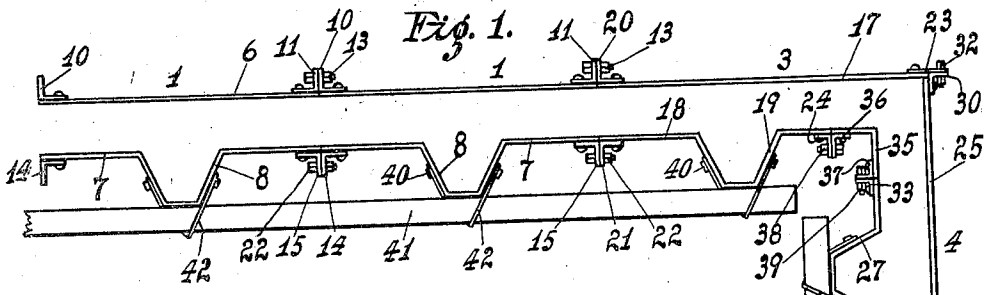
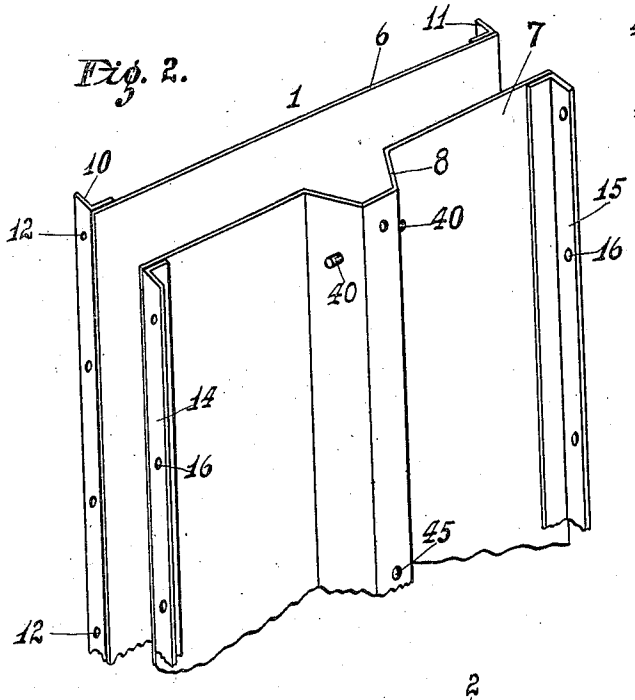


Fig. 2.



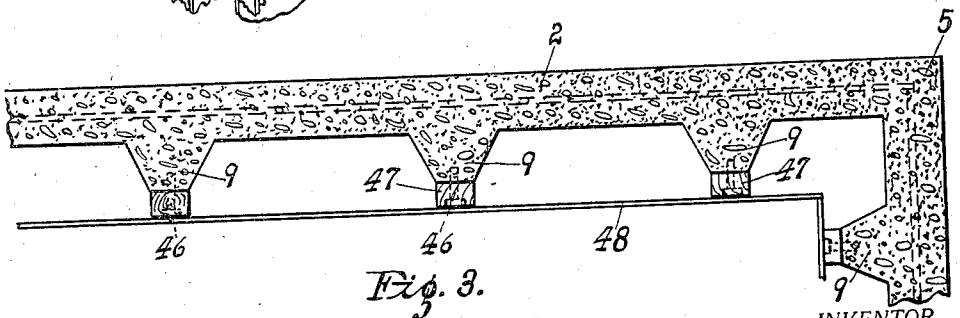


Fig. 3.

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UNITED STATES PATENT OFFICE.

DAVID D. HUGHES, OF OAKLAND, CALIFORNIA.

CONCRETE-BUILDING FORM.

Application filed January 31, 1921. Serial No. 441,201.

To all whom it may concern:

Be it known that I, DAVID D. HUGHES, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Concrete-Building Forms, of which the following is a specification.

My invention is an improved concrete building from which may be used indefinitely in the construction of buildings and by means of which vertical ribs are formed on the inside of the wall for supporting and spacing the interior plaster inwardly from the wall to prevent the dampness of the wall from contacting with and cracking or otherwise spoiling the plaster.

Referring to the annexed drawing in which my invention is illustrated and which forms a part of this specification:

Figure 1 is a plan view of my form in position to receive the concrete to form the wall of a building.

Figure 2 is a perspective view of one of the main sections of my form.

Figure 3 is a plan view of a wall formed by my form, with the plaster secured to the inside ribs of the wall.

My form includes a plurality of main sections 1 for casting the main portion 2 of the wall, and a pair of corner sections 3 and 4 for casting each corner 5 of the wall. Each section 1 included an outer plate 6 and an inner plate 7, the latter plate being formed with a vertical trough-shaped impression 8 extending inwardly into the interior of the building for casting vertical ribs 9 on the inside of the wall. To the side edges of the plates 6 are riveted angle irons 10 and 11 respectively, the outstanding flanges of said angle irons having holes 12 to receive bolts 13 to bolt the adjoining plates 6 of the sections 1 together. Angle irons 14 and 15 are riveted to the side edges of the plates 7, the outstanding flanges of said angle irons having holes 16. The section 3 includes an outer plate 17 and an inner plate 18, the inner plate being formed with a trough-shaped vertical impression 19 extending inwardly into the interior of the building. An angle iron 20 is secured to one edge of the plate 17. The bolts 13 extend through the outstanding flange of the angle 20 and the corresponding flange of the angle iron 11 on the adjacent edge of the plate 6 of the adjoining section 1, thus detachably holding the plate 17 and said plate 6 together. Angle iron 21 is secured to one edge of the plate 18 and bolts 22 extend through the outstanding flange of said angle iron and the corresponding flange of the angle iron 15 on the adjoining edge of the plate 7 of the adjoining section 1, whereby the plate 18 and side plate 7 are detachably held together. Bolts 22 also extend through the holes 16 in adjacent angle irons 14 and 15 whereby the plates 7 of adjoining sections 1 are detachably secured together. A plate 23 is riveted to the outer edge of the plate 17, said plate 23 projecting beyond the edge of the plate 17. An angle iron 24 is secured to the edge of plate 18 opposite the edge to which the plate 21 is secured. The corner section 4 includes an outer plate 25 and an inner plate 26, the inner plate being formed with a trough-shaped impression 27 extending inwardly into the interior of the building to form a rib 9. Angle irons 30 and 31 are secured to the respective side edges of the plates 25. Bolts 32 extend through the projecting part of plate 23 and the outstanding flange of the angle iron 30 whereby the corner edges of the plates 17 and 25 are detachably secured together. Angle irons 33 and 34 are riveted to the respective edges of the plates 26. An angle iron 35 fits the inner corner of the wall between the adjacent ends of the plates 18 and 26, and angle irons 36 and 37 are riveted to the edges of the angle iron 35 so that their outstanding flanges engage the outstanding flanges of the angle irons 24 and 34. Bolts 38 extend through the adjacent flanges of the angle irons 24 and 36 whereby the angle iron is detachably secured to the plate 18. Bolts 39 extend through the adjacent flanges of angle irons 33 and 37 whereby the angle iron 35 and the plate 26 are detachably secured together. The angle irons 31 and 34 are bolted to angle irons 10 and 14 on plates 6 and 7 of the adjoining main section 1. Lugs 40 are provided on the side walls of the impressions 8, 19 and 27. A beam 41 is secured against the intermediate wall of the impressions 8 and 19 inside of the wall by wires 42 wrapped around said beam and fastened to said lugs 40. A beam 43 is secured against the intermediate wall of the impressions 8 and 27 inside the building by wires 42 wrapped around said beam and

fastened to the lugs 40 on said impressions. The beam 41 holds the sections 1 and 3 in alignment with each other. The beam 43 holds the sections 1 and 4 in alignment with each other. The intermediate walls of the impressions 8, 19 and 27 are provided with apertures 45 through which pegs are inserted to make holes in the ribs 9 to receive bolts 46 to secure wooden securing strips 47 to the back of said ribs.

When the concrete is poured between the plates 6 and 7, 17 and 18 and 25 and 26, and the wall cast, the form may be removed from the wall upon removing the bolts 13, 22, 32, 38 and 39.

Laths 48 are secured to the strips 47 and the plastering is placed on the laths. The ribs 9 space the plaster from the wall so that the moisture cannot reach the plaster and crack or otherwise injure it.

My form is a great saving over wooden forms because it may be used on different buildings indefinitely and may be placed in position or taken down by unskilled labor.

Having described my invention, I claim:

1. A building form including an outer panel and an inner panel, the inner panel having a trough shaped impression therein whereby a rib may be formed projecting outwardly from the inner wall of the building constructed, said impression being located between the edges of the inner panel.

2. A building form including a plurality of sections, each of said sections having inner and outer panels, means for detachably bolting the sections together, the inner panels of each section being formed with vertical trough shaped projections for casting vertical ribs projecting outwardly on the inner wall of the building being constructed.

3. A building form including a plurality of sections, each of said sections having inner and outer panels, means for detachably bolting the sections together, the inner panels of each section being formed with vertical trough shaped projections for casting vertical ribs projecting outwardly on the inner wall of the building being constructed and means for detachably securing a beam to said projections to hold the sections in alignment with each other.

4. A building form including a plurality of sections, each of said sections having inner and outer panels, means for detachably bolting the sections together, the inner panels of each section being formed with vertical trough shaped projections for casting vertical ribs projecting outwardly on the inner wall of the building being constructed, said projections being provided with holes through which pegs may be inserted into the wall of the building being constructed.

5. A building form including outer and inner panels, the inner panel having a vertical trough shaped impression therein whereby a rib may be formed outwardly on the inner wall of the building being constructed, said impression being located midway between the vertical edges of the inner panel.

In testimony whereof I affix my signature.

DAVID D. HUGHES.