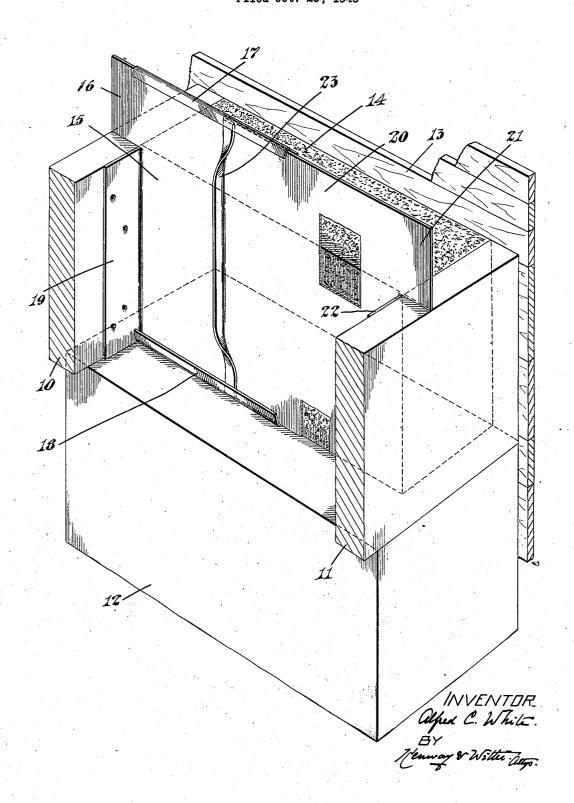
A. C. WHITE

FORM FOR CONCRETE WORKS
Filed Oct. 23, 1946



UNITED STATES PATENT OFFICE

2,443,846

FORM FOR CONCRETE WORK

Alfred Charles White, Lowell, Mass.

Application October 23, 1946, Serial No. 705,037

3 Claims. (Cl. 25—118)

1

This invention comprises a new and improved metal form for use primarily in molding fire stops in frame houses, but is adapted to be used whereever it is desired to place concrete bodies be-

tween spaced floor timbers or the like.

The concrete fire stopping required by building ordinances in many cities and towns has been heretofore constructed with the assistance of wooden forms which have been placed individually between the floor timbers and generally over 10 the sills or girders of the floor. A set of these wooden forms for a dwelling house of moderate size frequently requires 700 board feet of lumber and 72 hours of carpenter work. An object of sheet metal forms that may be conveniently and rapidly placed, which are adjustable for variations in spacing of the floor timbers, and which may be removed and used over and over again as soon as the concrete body has set. The novel 20 form of my construction achieves these advantages. A set of 100 forms is adequate for use in the construction of a house and the forms may be set in place and removed in not over 4 hours in all. My invention, therefore, is not only of 25 great importance in saving labor, but it results in a substantial saving of material and in the production of the fire stopping of improved quality.

In one aspect the form of my invention comprises a pair of complemental sheet metal members having flanged sliding connection with each other whereby the effective width of the form may be adjusted, and each having a laterally projecting ear whereby the form as a whole may be 35 suspended between adjacent floor timbers.

These and other features and advantages of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof, selected for purposes 40 of illustration and shown in the accompanying drawing in which the figure is a view in perspective showing the form in place between the floor timbers of a building, portions being broken away to show more clearly the concrete stopping.

While the precise location of the form in a building is of secondary importance, it is herein shown as secured in place between parallel floor timbers 10 and 11 which rest at their ends upon a sill 12. The timbers 10 and 11 may be spaced 50 12" to 14" apart, for example, and may be 2 x 9" in cross-section. The space at the end of the timbers 10 and 11 is closed by sheathing 13. It is in this space between the timbers 10 and 11, above

desired to mold a rectangular concrete block 14 which constitutes fire stopping.

The form of my invention as herein shown comprises a pair of complemental sheet metal members. The left hand member 15, shown in the accompanying figure, has a laterally projecting ear 16 at its upper left hand corner, this being arranged to overlap the timber 10 and so suspend the form in the space between the timbers 19 and 11. The member 15 has a guide flange 17 formed in its upper edge and a corresponding guide flange 18 formed in its lower edge. Along its left hand vertical edge it is provided with a right angle flange 19 perforated so that it may the present invention is to provide adjustable 15 be nailed temporarily to the inner face of the timber 10 thus maintaining the form in the proper location and in vertical position.

The other member 20 of the form is provided with a laterally projecting ear 21 at its upper right hand corner as seen in the figure of the drawing, arranged to overlap the timber 11 and cooperate with the ear 16 in locating the form as a whole. It is also provided along its right hand vertical edge with a right angle flange 22 perforated and adapted to be secured to the inner face of the timber II corresponding to the flange 19. The upper and lower edges of the member 20 are slidingly received within the guide flanges 17 and 18 of the member 15. It will be apparent that the effective width of the form as a whole may be readily adjusted by merely telescoping together the two component members of the form. The member 20 is provided in its inner vertical edge with a reinforcing flange 23. This flange is flattened at both ends so that it will slide freely within the guide flanges 17 and 18 of the member 15. It serves not only to stiffen the member 20 in which it is formed but the assembled members as located in operative position.

It will be apparent that in use the form may be suspended by the ears 16 and 21 on adjacent floor timbers, spread apart to fit the width of the timbers in the particular location, adjusted along the timbers so as to form a rectangular mold space of the right dimensions in association with the siding 13, and then secured firmly in place by nails driven through the flanges 19 and 22 into the floor timbers. Concrete is now poured in the space thus formed in the shape of the block 14. It will be noted that the two form members 15 and 20 present a susbtantially smooth face against the concrete, while the guide flanges 17 and 18, the reinforcing flange 23, and the attaching flanges 19 and 22 all project from the rear or the sill 12 and within the sheathing 13, that it is 55 outer side of the form. After the concrete has

set, the attaching nails may be pulled from the flanges 19 and 22, the form collapsed and removed from its position in readiness for further use in a new location.

Having thus disclosed my invention, I claim 5 as new and desire to secure by Letters Patent:

1. A form for use in molding fire stops, comprising a pair of complemental sheet steel members having flanged sliding connection with each other whereby the effective width of the form may be adjusted, means for suspending the form between adjacent floor timbers, and a right angle flange on the outer edge of each member adapted to be nailed to the face of the floor timber from which the member is suspended.

2. An adjustable form for use in molding fire stops in frame houses, comprising complemental sheet metal pieces each having a laterally projecting ear at its upper and outer corner and a vertical right angular flange extending along its outer edge beneath its said ear, one of said pieces having guide flanges at its upper and lower edges in which the other piece is slidingly received in overlapping relation, and said other piece having a stiffening flange in its inner edge which 25

extends between the two guide flanges of the piece first mentioned, the pieces together presenting a substantially smooth surface for molding one face of a concrete stop and being adjustable as to width.

3. A form for molding fire stops, comprising a pair of complemental sheet metal members associated to form a substantially smooth face on one side and having on the other side a flanged sliding connection, a stiffening flange and attaching flanges by which the form as a whole may be secured in position between the spaced timbers of a building.

ALFRED CHARLES WHITE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,131,840	Hunt	Mar. 16, 1915
1.616.354	Comer et al	Feb. 1, 1927
1.246,404	Dunning	Nov. 13, 1917
1,268,676	Bunker	Feb. 1, 1927