

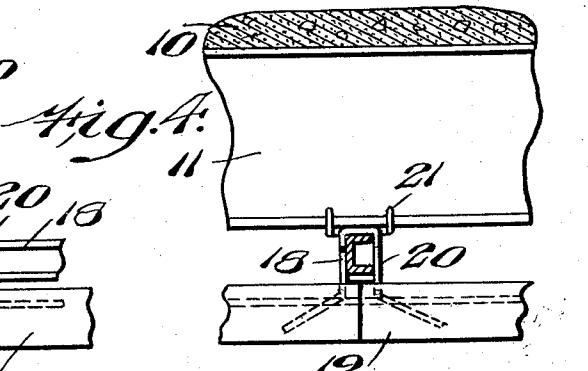
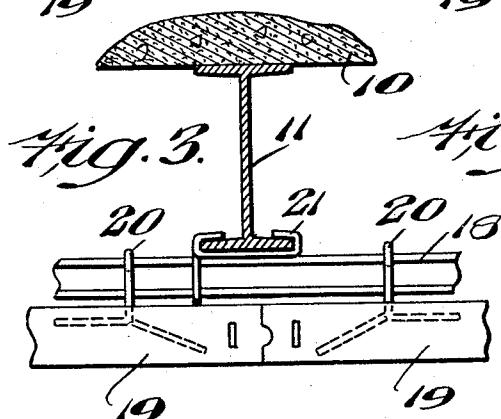
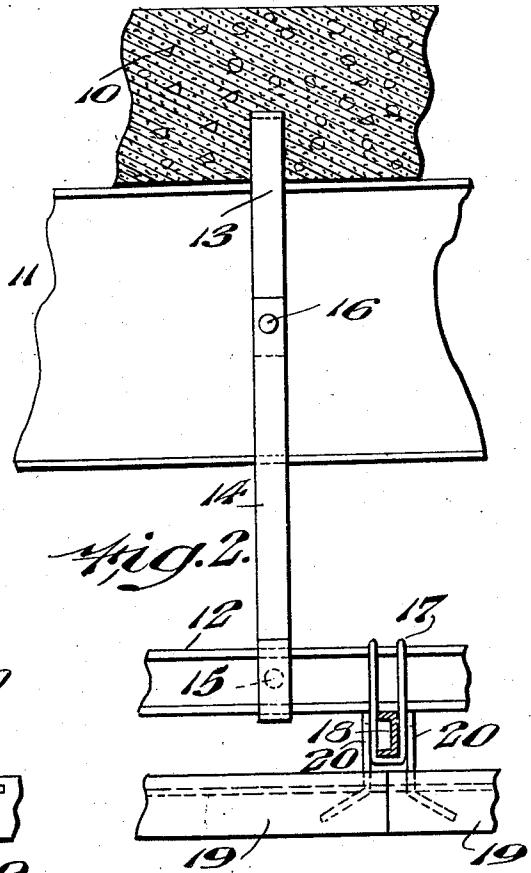
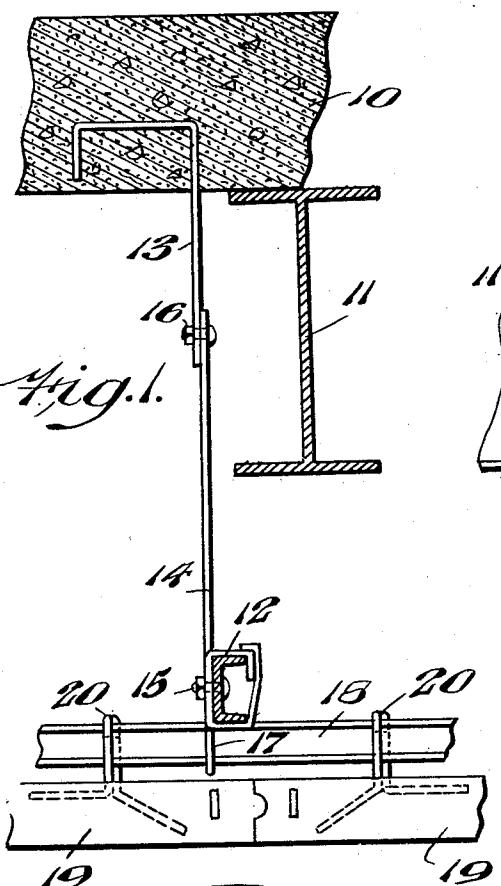
April 19, 1932.

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1,854,968

SUSPENDED CEILING CONSTRUCTION

Filed March 25, 1931



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Patented Apr. 19, 1932

1,854,968

UNITED STATES PATENT OFFICE

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SUSPENDED CEILING CONSTRUCTION

Application filed March 25, 1931. Serial No. 525,064.

This invention, generally stated, relates to a building construction and has more particular relation to a building structure employing suspended ceilings of precast slabs of cementitious material.

The leading object of the present invention is to make use of existing supporting conditions as I find them in a building structure for supporting precast ceiling slabs of cementitious material from a common carrier including a plasterer's channel.

A further object of the present invention resides in the provision of a building construction in which there is first erected a scaffold beneath the ceiling slabs to be suspended and to make use of such beams, as for instance steel joists, irons, or similar metallic supports, as may be present above the ceiling to be formed, and thereafter support the ceiling slabs from a common support including a plasterer's channel.

A still further object of the present invention resides in the suspended ceiling construction including precast slabs of cementitious material which may be readily erected by unskilled labor.

A still further object of the present invention resides in the provision of a structure of the character stated in which the precast ceiling slabs may be supported directly from a plasterer's channel, which plasterer's channel in turn may be either suspended by hangers from the floor of fireproofing material or which plasterer's channels may be supported from the steel joist or similar floor supporting metallic member.

Other and further objects of the present invention reside in the provision of general details of construction and in the arrangement, connection, and combination of parts for attaining the results sought by the foregoing objects in an expeditious and inexpensive manner.

The invention consists of the novel construction hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken

in connection with the accompanying drawings forming part hereof, and in which:

Fig. 1 is a fragmentary view, partly in elevation and partly in section, illustrating a fire proofing floor suspended from which through the medium of a common carrier, as a plasterer's channel, are precast slabs of cementitious material;

Fig. 2 is a view of Fig. 1 viewed from the left hand side thereof;

Fig. 3 is a fragmentary view, partly in elevation and partly in section, illustrating a slightly modified form of supporting precast slab of cementitious material from a floor of fireproofing material; and

Fig. 4 is a view of Fig. 3, viewed from the left hand side thereof.

For the purpose of illustrating my invention I have shown in the accompanying drawings two forms thereof which are at present preferred by me, since the same have been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring to the drawings in detail, and with more especial relation to Figs. 1 and 2, the reference numeral 10 designates a floor of fireproofing material, as one may find it according to common practice, and which may be reinforced or not as desired. The fireproofing flooring 10 is supported as shown in the drawings upon floor beams 11, which may be steel joists or other metallic floor members. From the fireproofing flooring 10, as shown in Figs. 1 and 2, I suspend plasterer's channel 12 by means of a hanger, which hanger is in two parts, one end 13 of which is embedded in the fireproofing material 10 and the other end of which has bolted thereto as at 15 the plasterer's channel 12. Intermediate of its height the hanger parts are bolted together as at 16. Suspended from the plasterer's channel 12, as by so-called hair pin clips 17, is a second plasterer's channel 18 which is arranged at

right angles to the plasterer's channel 12 and at right angles to the steel joist 11, it being understood that the plasterer's channel 12 parallels the steel joist 11. The reference numeral 19 designates precast slabs of cementitious material arranged end to end in abutting relation in a plane below the common carrier 18 and suspended therefrom by means of so-called hair pin clips 20, although other forms of clips may be employed for suspending the precast ceiling slabs from the common carrier 18.

In erecting the above described suspended ceiling of precast cementitious slabs, there is first built beneath the fireproofing flooring 10 a scaffolding to enable the mechanic to work from a position beneath the precast slabs 19, the advantage of which is obvious. With the common carrier 18 in place the mechanics are enabled to readily and expeditiously suspend the precast slabs from the common carrier. By this arrangement and construction of parts a building construction may be erected much quicker, cheaper, and in a more efficient manner without the necessity of employing skilled labor than present-day constructions.

Referring now to Figs. 3 and 4, in lieu of supporting the common carrier 18 from a plasterer's channel the same is supported from the lower flange of the steel joist 10 by means of suitable clips 21 which may be of any preferred form, those in the drawings being made of wire. The precast slabs 19 which are similar to those shown in the foregoing figures are also provided with so-called hair pin clips 20, whereby the precast slabs are suspended from the common carrier 18, the same being a plasterer's channel as in the foregoing figures.

I am aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and I therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

50. What is claimed is:

1. A construction of the character stated comprising in combination a completed flooring of fireproofing material, spaced floor beams including steel joist upon which said completed flooring is supported, a common carrier including a plasterer's channel iron arranged parallel with and in a plane below the completed floor and at right angles to said floor beams, means detachably secured with respect to at least some of said floor beams for suspending said common carrier, precast ceiling slabs arranged end to end in a plane below and out of contact with said common carrier, and hangers detachably secured with respect to and depending

from said common carrier for engaging with said slab ends for support thereof.

2. A construction of the character stated comprising in combination a completed flooring of fireproofing material, spaced floor beams including steel joist upon which said completed flooring is supported, a common carrier including a plasterer's channel iron arranged parallel with and in a plane below the completed floor and at right angles to said floor beams, means including hangers embedded in said flooring for detachably supporting said plasterer's channel, precast ceiling slabs arranged end to end in a plane below and out of contact with said common carrier, and hangers detachably secured with respect to and depending from said common carrier for engaging with said slab ends for support thereof.

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