Jan. 6, 1970 T. J. GUTT 3,487,597

INTEGRAL PRECAST CONCRETE LINTEL-BALCONY COMBINATION

Filed April 2, 1969 4 Sheets-Sheet 1

FIG. 1

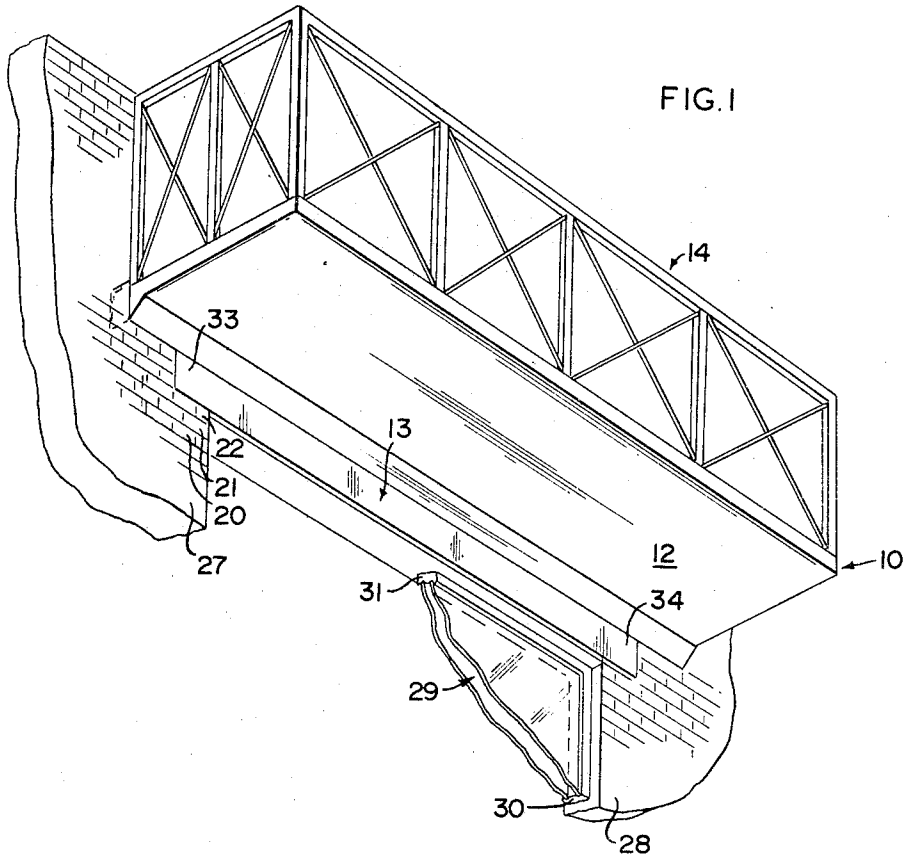
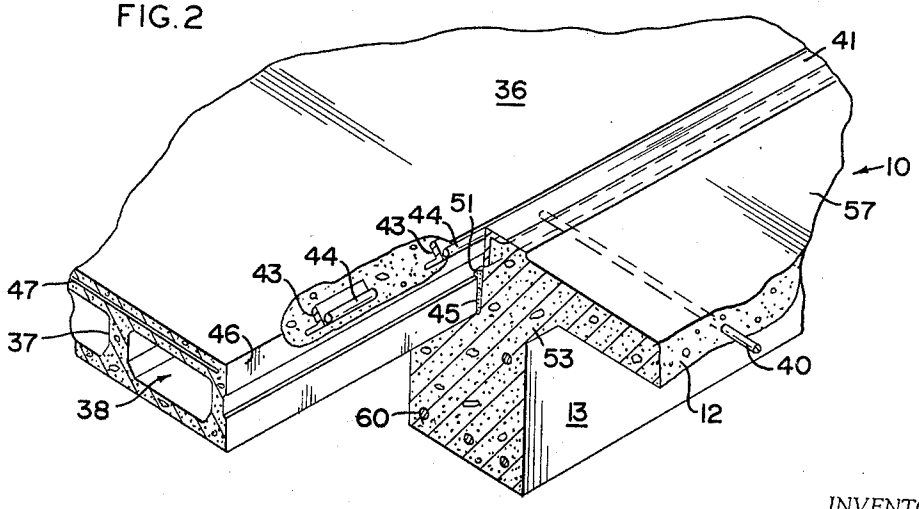


FIG. 2



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INTEGRAL PRECAST CONCRETE LINTEL-BALCONY COMBINATION

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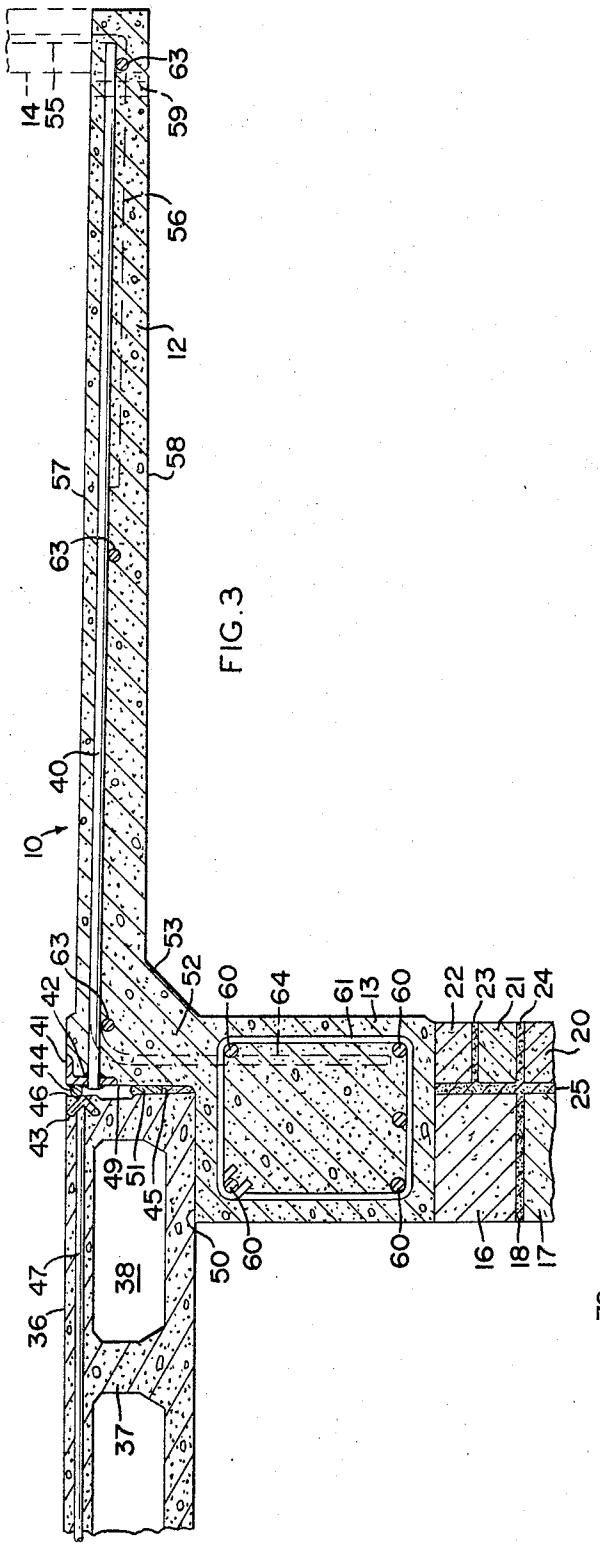


FIG. 3

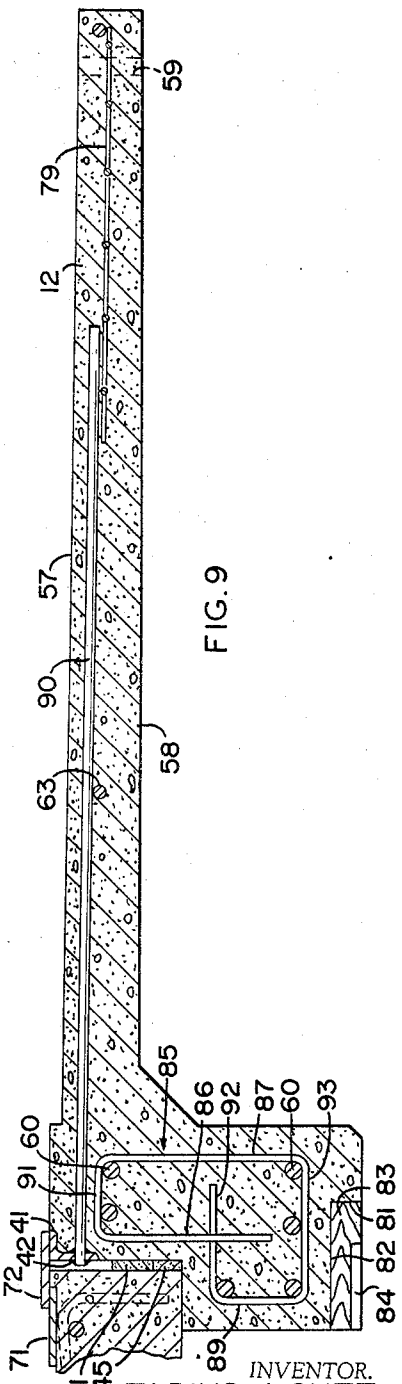


FIG. 9

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INTEGRAL PRECAST CONCRETE LINTEL-BALCONY COMBINATION

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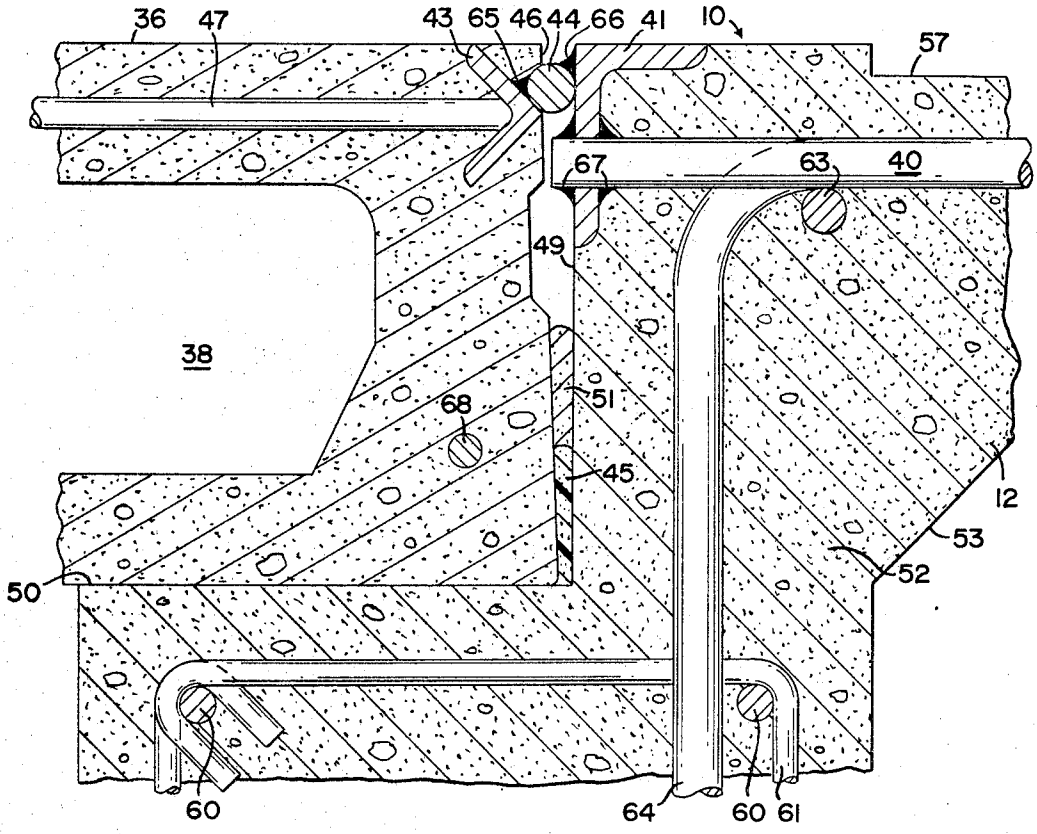
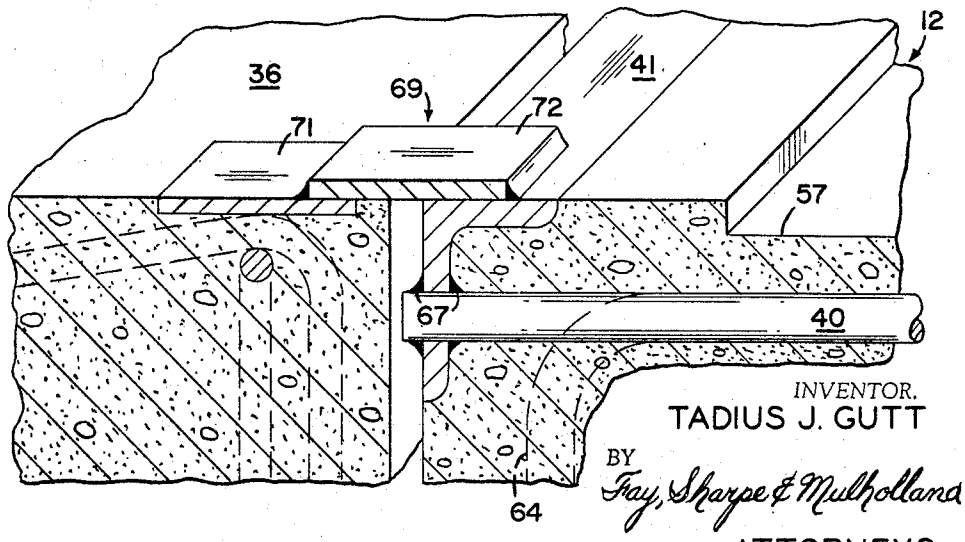


FIG. 4

FIG. 5



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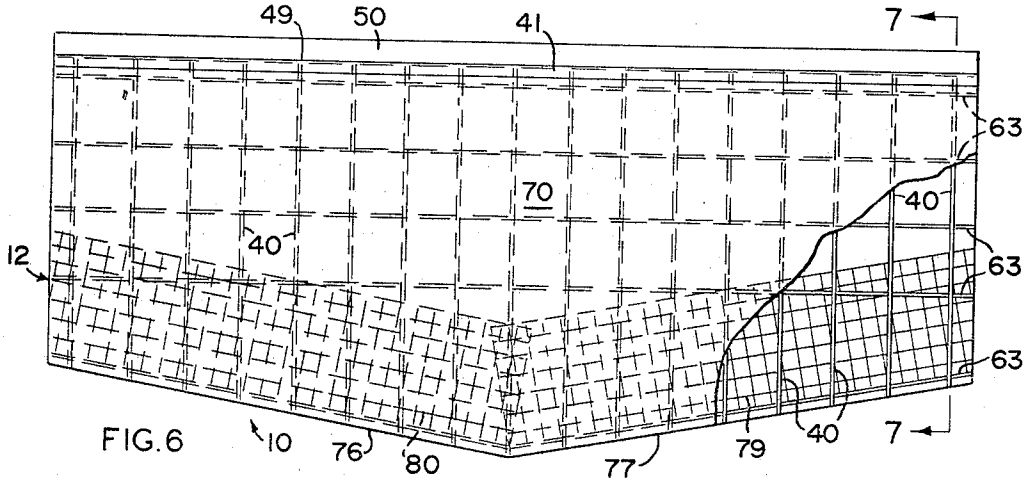


FIG. 6

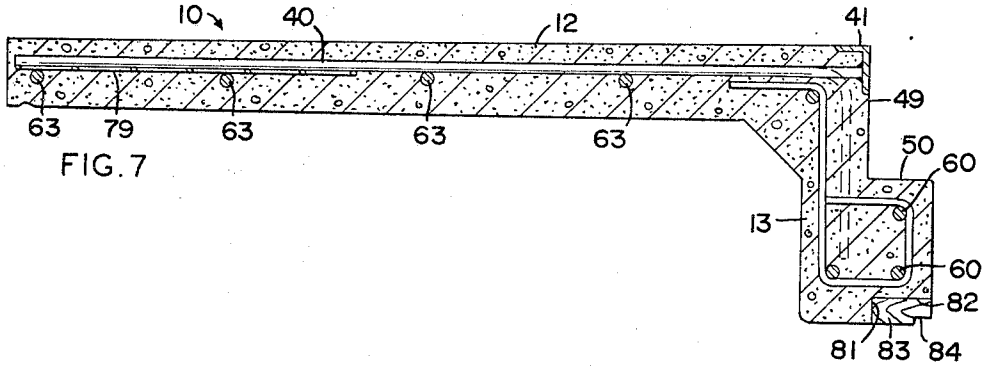


FIG. 7

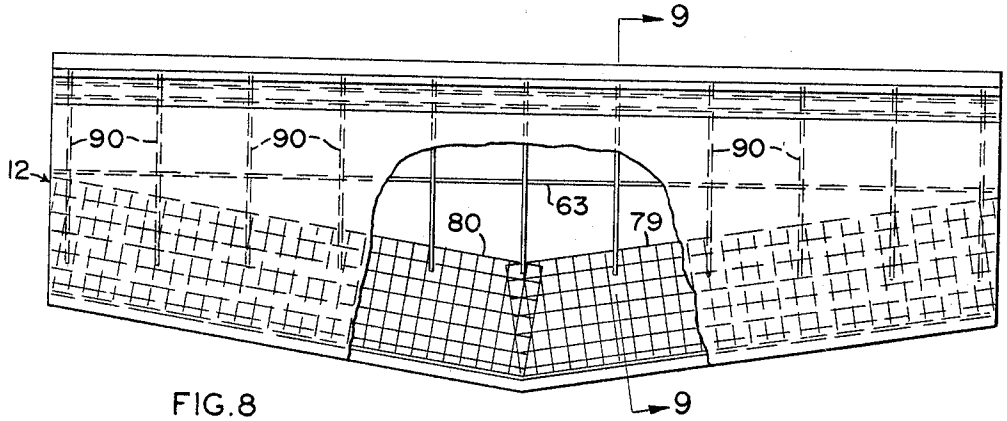


FIG. 8

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United States Patent Office

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INTEGRAL PRECAST CONCRETE LINTEL-BALCONY COMBINATION

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Int. Cl. E04b 1/34; E04f 10/00
U.S. Cl. 52—73 18 Claims

ABSTRACT OF THE DISCLOSURE

An integral, precast, concrete, combination lintel-balcony construction unit is disclosed as having, when positioned in a building structure, a generally horizontally extending deck portion, and an integrally cast lintel to provide the horizontal supporting member for the access portal to the balcony as well as an opening immediately below. Cast wtihin the deck portion are metallic reinforcing members which are partially exposed in proximity to the lintel to provide connecting means which may be secured to a plurality of spaced attaching members positioned at the outer surface of the deck slabs forming the floors of the building. In addition, the deck slabs may also rest in a load-bearing relationship on another of the surfaces of the lintel portion of the unit. The details relating to the various internal reinforcing structures are also disclosed.

The method of erecting a building structure having a balcony and access thereto includes the procedural combination of steps of constructing a pair of wall-like structures to define an access opening having a predetermined span, positioning a construction unit according to the invention so that the lintel spans the access opening and the deck portion extends generally horizontally therefrom, positioning an integral precast slab portion forming the floor of the building structures so that a surface of the floor is in a load-bearing relationship with a surface of the lintel of the lintel-balcony construction unit and securing the floor slab to the deck slab to provide a stable, yet efficient and easy-to-construct building unit.

BACKGROUND OF THE INVENTION

This invention realtes to a method of building and a construction unit for a building structure. More particularly, this invention relates to an integral, precast, reinforced concrete, lintel-balcony construction unit. In addition, this invention relates to the method of erecting a building structure utilizing the apparatus according to the invention.

PRIOR ART

With the advent of new and improved multi-story buildings, particularly of the high-rise type of construction, it has become desirable to provide a tenant with access to the outdoors at his apartment level. One of the most convenient methods of achieving this aim has been to provide the building with a balcony arrangement and an access thereto for each of the apartment units in the building.

It has also long been a problem in a construction of multi-story buildings to minimize the cost and increase the speed of construction, while yet providing an esthetically pleasing appearance to the building. In addition, it is always a desire to reduce construction costs so that the economic attraction of the building construction to prospective tenants is enhanced.

Thus, it has long been a ploblem in the art of constructing these types of buildings to provide a generally horizontally-extending balcony-like deck slab which, in some reasonable manner, relates to the building construction as a whole. In a typical prior art construction, a pair of wall-like structures is provided which provide an access to the balcony on a given floor. Since such balcony constructions generally utilize a plurality of balconies in a tiered relationship, it becomes necessary to find a stable and yet economically resonable building construction to provide the lintel for the access opening for the floor below while yet providing sufficient support for the horizontally extending floor slab of the next uppermost adjacent floor. Because these balconies are generally in vertical alignment in the building, the structural integrity of the building may easily be threatened.

Furthermore, one of the serious problems confronting the builder or architect in providing for such a building construction is in recognizing the need for overcoming the rotational moments about the pivot point of the balcony due to the cantilevered construction of the balcony structure.

Thus, it is an object of this invention to provide a precast, reinforced concrete, integral lintel-balcony construction unit for use in buildings having a series of balconies positioned one above the other.

It is a further object of this invention to provide a construction unit having a deck portion to serve as a balcony and a lintel portion to provide the lintel structure for the access to the balcony on the floor below.

It is a further object of this invention to provide a reinforced concrete, precast, integral lintel-balcony construction unit wherein a lintel portion is structured to receive a portion of a deck slab in a load-bearing relationship therewith.

It is a further object of this invention to provide an integral lintel-balcony construction unit having attachment means precast in the lintel portion thereof for securing the integral unit to a portion of the building under construction.

It is a further object of this invention to provide means in the lintel portion of an integral precast balcony-lintel combination for receiving the header for the access opening below and also configured to receive the drywall construction of the ceiling below.

It is still a further object of this invention to provide means for securing an integral construction unit including a balcony portion to a portion of the building under construction.

It is still a further object of this invention to provide an integral balcony construction unit having reinforcement mesh in the outer edge thereof.

It is a further object of this invention to provide an integral precast lintel-balcony construction having internal reinforcing members which traverse and securely interconnect the lintel and balcony portions.

It is still a further object of this invention to provide a method for erecting a construction unit having a series of vertically spaced balconies with a portion of each balcony serving as a lintel for the opening to the balcony below it.

It is a further object of this invention to provide a method for erecting a construction unit by positioning a precast construction unit over an opening, positioning a floor slab adjacent thereto and securing the precast unit to the floor slab.

These and other objects of the invention will become apparent when considering the following summary of the invention and the detailed description of preferred embodiments and best mode indicated herein.

SUMMARY OF THE INVENTION

This invention is directed to the solution of the foregoing problems and relates to an integral, precast lintel-balcony combination construction unit. The unit has a deck portion which, when the unit is positioned in the

building, comprises a generally horizontally-extending tapered precast portion having internal reinforcing members. In certain embodiments, the reinforcing member may include mesh-like wire web disposed adjacent the outer edge of the balcony and internally of the overall structure.

The integral unit includes a lintel having a surface for receiving, in a load-bearing relationship, a deck slab which constitutes the adjacent floor of the building unit under consideration. Attaching means are included within the floor slab and within the deck portion of the balcony for securing the components, one to the other, to overcome the rotational moment generated by the weight of the balcony structure and by the presence of loads on the balcony unit.

Reinforcing members are also disposed within the lintel of the balcony unit and within the deck portion thereof. Further reinforcing means interconnecting the lintel portion and the balcony portion are also provided for structural integrity.

The method according to the invention is directed to erecting a building structure having balconies and access thereto which comprise the procedural combination of steps of:

(1) Constructing a pair of wall-like structures defining an access opening having a predetermined span,

(2) Positioning a construction unit having a deck portion and lintel portion so that the lintel portion spans the access opening and so that the deck portion extends generally horizontally outwardly therefrom,

(3) Positioning a precast floor slab portion of the building so that one surface is in a load-bearing relationship with a surface of the integral construction unit, and

(4) Securing a portion of the integral construction unit to the floor slab portion.

In a particular embodiment, metallic attachment members in the form of angle irons are provided in each of the balcony slab structure and in the deck structure, so that they may be welded together to secure the adjacent structural member.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a precast lintel-balcony combination according to the invention.

FIG. 2 is a partial sectional view showing a connection between the lintel-balcony combination and the deck slab of the adjacent floor member.

FIG. 3 is a cross-sectional view of the precast lintel-balcony combination according to the invention secured to the adjacent floor slab and the respective positions in the building structure.

FIG. 4 is a detailed view in cross-section showing one means for securing the precast lintel-balcony combination to the adjacent floor slab.

FIG. 5 shows an alternate means for attachment of the lintel-balcony combination to the adjacent floor slab.

FIG. 6 is a plan view of the precast lintel-balcony combination according to one embodiment of the invention showing its external configuration and the orientation of the internal reinforcing structure, together with the wire mesh adjacent the outer edge of the balcony.

FIG. 7 is a cross-sectional view taken along line 7—7 of FIG. 6.

FIG. 8 is a plan view of another embodiment of the invention utilizing nearly equal length reinforcing rods together with mesh at the outer periphery of the balcony for reinforcement purposes.

FIG. 9 is a cross-sectional view taken along line 9—9 of FIG. 8, and showing the embodiment of FIG. 8 secured to an adjacent floor deck member.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 shows the precast monolithic, precast concrete, lintel-balcony construction unit according to the invention, shown generally at **10**. The unit **10** comprises a deck slab **12** integrally precast with a lintel portion **13**. As may be appreciated, the lintel portion **13** of the unit **10** provides the horizontal architectural member which supports the weight above an opening, such as a window or a door beneath the unit.

Where desired, the balcony combination **10** may include a precast balustrade or railing structure **14**. In the alternative, the railing structure may comprise ornamental iron work secured to the balcony combination during the precasting operation.

From FIGS. 1 and 3, it may be understood that in a typical building construction having, by way of example, an interior support wall comprising concrete or cement blocks **16** and **17** suitably joined, as is well-known in the art, by a mortar joint **18**. Ornamental facing bricks are provided adjacent the blocks **16** and **17** and are secured in a tiered relationship. By way of example, tiers of bricks **20**, **32** and **22** are secured by mortar joints **23** and **24**. The external outer wall may be secured to the concrete block inner wall, as is understood in the art, by a mortar connection such as is illustrated in FIG. 3 at numeral **25**.

From FIG. 1, it may be seen that it is desirable to provide a balcony and access to the balcony in a building structure. To this end, cement block and brick construction is provided according to a predetermined plan such that a left wall structure **27** and a right wall structure **28** define an opening having a predetermined span therebetween. In the embodiment shown in FIG. 1, the span is traversed by a double-wall window structure **29** having a vertical header **30** attached to wall **28** and a horizontal upper header **31** secured to the lintel portion **13** of the construction unit **10**. While shown only in a fragmented view, it may be readily understood that the window structure **29** may also be of a sliding door variety and that the selection of the type of structure used is in accordance with the size of the span and the desires of the builder and/or the architect.

During construction of the building, the walls **27** and **28** are erected to a predetermined height and have a predetermined span between the walls **27** and **28**. In the embodiment shown in FIG. 1, the respective ends of the lintel portion **13** are sized in accordance with the strength requirements of the overall structure and, as depicted, include overlapping opposite end portions **33** and **34**. If desired, the lintel portion **13** may extend the entire width of the deck slab portion **12**. In that case, end portions **33** and **34** will rest on a wider portion of the walls **27** and **28** respectively than is shown in FIG. 1.

Moreover, the overall configuration of the precast structure **10** may be such that the portions **33** and **34** are notched at their front face to provide a space for the brick facing while yet providing, at the rear portion of the lintel combination, sufficient bearing surface to support the balcony structure **10**. When this alternative structure is used, the apparent width of the lintel **13** is the same as the span between walls **27** and **28**.

The cost savings and the convenience of construction are readily apparent from FIG. 1, where the insertion of the unitary, integral structure **10** into the building during its construction provides both the lintel for the attachment of the portal of the adjacent lower floor and at the same time provides the balcony for the next adjacent floor. It, of course, may be understood, that beneath the particular lintel portion may reside a conventional loggia structure where it is desired to keep the lowermost span unobstructed. Such an arrangement may be contemplated, for example, where the balcony unit **10** forms the second floor of a building which includes an arcade-like structure on the first floor and where it is not desired to fill the span between the respective walls **27** and **28**.

FIG. 2 shows the relationship between the balcony-lintel construction unit **10** and the adjacent floor structure, which may be precast, and which comprises the floor

surface of the building unit at the same level as the balcony. The floor slab **36**, which may also be made from precast concrete and positioned in the building construction as a unit, rests upon a load-bearing surface of a notch-like arrangement in the lintel **13**. By way of illustration, the floor slab **36** comprises a precast unit having an internal web **37** and void structure **38**. It may be understood that the webs and voids may also traverse the floor slab **36** in a direction normal to that depicted, as seen by the floor slab illustrated in FIG. 9.

In its simplest concept, as best seen in FIGS. 2 and 3, the deck slab portion **12** comprises first reinforcing means which include a plurality of reinforcing members **40** secured to connecting means **41** as by welding, as shown by the weldments **42**. In its preferred embodiment, attachment means **41** is a metallic angled member which, when positioned as shown, provides part of the inner edge structure and part of the inner upper surface of the deck slab portion **12**.

Floor slab **36** includes attaching means **43**, comprising a plurality of spaced metallic angled attaching members, provided integrally with the slab during its precasting. As shown, a plurality of metallic welding members **44** are positioned in contact with the spaced attaching member **43** and in contact with connecting member **41**.

Thus, it can be understood that during the construction, the integral precast lintel-balcony combination **10** is positioned, and the floor slab **36** is rested upon the notch in the lintel portion **13** of the slab **10**. By reason of the shim **45**, the floor **36** will be spaced from the slab **10**. The welding member **44** is positioned in contact with the spaced attachnig means **43** and with the connecting means **41**. The two structures are thus welded together to provide a sturdy, efficient and rapid means for completing the construction under consideration. In addition, grout **51** will be provided in the space between the floor slab **36** and the balcony deck slab **12**.

FIG. 3 shows the floor slab lintel-balcony combination arrangement in its cross-sectional detail. The spaced attaching members **43** of floor slab **36** may be formed by spacing metallic angled members having a portion thereof adjacent to, forming part of, or protruding from the outer surface **46** of the flor slab **36**. In addition, the spaced members **43** may be integrally secured as by welding to the floor slab structure by means of an internal reinforcing member **47** integrally precast within the floor slab **36**.

The upper and inner portion of the lintel **13** of balcony **10** defines a notch-like arrangement comprising the inner surface **49** of the deck slab and a load-bearing surface **50**. When in position, floor slab **36** rests on surface **50** in a load-bearing relationship. Surfaces **49** and **50** are generally planar and nearly normal to each other.

The transition from the lintel portion **13** to the deck slab portion **12** of the integral precast balcony **10** is defined by a neck like portion **52** which, in a preferred embodiment, has a transition surface **53**.

As heretofore discussed, the railing may be either cast of concrete when the combination **10** is cast or may be a metallic ornamental railing which is inserted in the precast balcony at the time the structure is formed. When precast, as can be seen in FIG. 3, it may be desirable to provide the integral precast, concrete railing portion **14** with an internal reinforcing member **55**. Reinforcing member **55**, in a preferred embodiment, may comprise a vertically extending portion and a horizontally extending portion **56** which is wholly contained within the deck slab **12** and, if desired, may be welded to the internal reinforcing member **40** contained therein.

Deck slab **12** comprises an upper surface **57** and lower surface **58** and has a predetermined thickness. Deck slab **12** is preferably tapered to provide for water runoff and to minimize the accumulation of snow, sleet and ice on the balcony. In a preferred embodiment, a drain opening **59**, as may be seen in FIGS. 3 and 9, is provided to permit the water to drain from the surface of the balcony **10**.

The internal reinforcement within the precast integral concrete structures may take a variety of forms, according to the structural needs of the unit. In FIG. 3, for example, a plurality of longitudinally extending bar-like reinforcing members **60** are contained within the lintel portion **13**. In juxtaposition with the longitudinally extending reinforcing members **60**, are a plurality of generally rectangular reinforcing loops **61** to provide structural integrity to the system. As may be seen in FIGS. 7 and 9, loops **61** may assume different configurations.

Similarly, in slab **12**, a plurality of longitudinally extending members **63** are provided to reinforce and tension the concrete. Moreover, it has been found desirable to include a plurality of reinforcing members **64** which are common to both the slab portion and to the lintel portion **13** and extend through the neck portion **52** of the integral structure. In FIG. 3, it may be seen in phantom outline that the reinforcing member **64** assumes a form having two legs, one normal to the other. One leg, it may be seen, extends vertically into the lintel portion while the other leg extends horizontally into the slab portion **12**.

FIG. 4 contains a highly articulated view of the joint in FIG. 3 between the floor slab **36** and the balcony unit **10**. Apparent in this enlarged view is the weldment **65** which joins the attaching member **43** in the floor slab **36** with the welding member **44** and the weldment **66** joining the connecting member **41** to welding member **44**. Also shown because of the greater detail is the means for attaching reinforcing member **40** to the connecting member **41** via weldments **67** disposed on both the inner and outer surface of connecting member **41**, and surrounding reinforcing member **40**. It may be understood that other suitable means for securing members **40** and **41** may also be used. Such means of attachment contemplated are the use of a threaded relationship between the respective members, or the provision for a cap-like reinforcing member to achieve the same purpose.

Also apparent, by way of illustration FIG. 4, is the longitudinally extending reinforcing member **68** contained within the floor slab member **36**.

FIG. 5 depicts another means for attaching the integral precast member **10** to the floor slab member **36**. In this instance, securing means, referenced generally at **69**, comprises a plurality of generally rectangular primary plate members **71** integrally secured at the upper surface of the floor slab member **36**. Additionally, generally rectangular, securing members **72** are provided which are individually secured such as by welding, to the primary securing members **71** and to the connecting members **41** on the unit **10**. In other respects, the structures defined in FIG. 5 are similar to those shown in FIG. 4 and need not be discussed in greater detail.

Structurally, the weight of the floor **36**, which is supported by a surface of the lintel **13**, and the strength of the connecting means, depicted in either FIGS. 5 or 6, cooperate with a high margin of safety to overcome the rotational moments created by the weight of the balcony about its natural pivot point.

Thus, while the weight of the balcony tends to cause a rotational moment in the clockwise direction, those rotational moments are counterbalanced by the weight of the floor which is supported by the lintel surface and by the force exerted by the connection of the respective connecting means.

FIG. 6 shows a plan view of the balcony-lintel integral structural combination **10** showing the internal reinforcing matrix shown generally at **70**. Generally, the reinforcing matrix **70** includes a plurality of longitudinally extending members **63** located in a spaced relationship within the deck portion **12**. Similarly, and generally normal to the reinforcing members **63**, are contained a plurality of laterally extending reinforcing members **40**. The size of

the reinforcement members, their placement within the slab **12**, and their means of attachment to one another, if desired, is a function of the particular installation.

In the particular embodiment shown in FIG. 6, it may be seen that the forward end of deck slab **12** comprises two faces **76** and **77** which join at approximately the midpoint of the slab to form a generally wedge-shaped outer structure.

For additional reinforcement, mesh-like wire members **79** and **80** are provided adjacent the outer faces **77** and **76** respectively, of the slab **12**. The width of the mesh may vary according to the additional strength needed in the peripheral area of the slab. As shown in FIG. 7, mesh **79** (and mesh **80**) may be secured near the outer end of members **40**, as by welding, if desired. Moreover, if desired, or if the balcony configuration permits, only a single mesh-like member may supplant the pair of members **79** and **80**, as shown.

When such a wedge-shaped structure is formed, however, it may be understood that the reinforcing members **40** are of differing lengths due to the varying distance of a point on surface **76** and **77** to the innermost surface **49** of the deck. To overcome the time lost and the problems inherent in individually sizing the reinforcing members **40**, it has been found desirable, as may be seen in FIG. 8, to provide the reinforcing members **90** which in that environment correspond to members **40** in FIG. 6 of approximately equal length.

FIG. 7 is a cross-sectional view of a balcony structure taken along lines **7—7** of FIG. 6. FIG. 7, it may be seen, is nearly a mirror image of the cross-sectional view of the structure shown in FIGS. 3 and 9. Noteworthy, however, is the provision of a rectangular notch having surfaces **81** and **82** of the lowermost and innermost portion of the lintel section **13**. Incorporated therein during the casting process may be a header receiving member **83** which may be made from wood. The member **83** may be notched as at **84** adapted to receive the ceiling material of the next floor below.

FIG. 9 is a view taken along line **9—9** of FIG. 8 and showing the means of connection like that shown in FIG. 5. FIG. 9 is thus similar to FIG. 7 and also includes an illustration of the reinforcing mesh **79** located near the outermost portion of the slab structure **12**. Also of interest, in FIG. 9, is the provision of longitudinally extending reinforcing members **60** as has been heretofore described, but used in conjunction with a loop-like reinforcing member **85**. Loop-like reinforcement members **85** comprise a pair of vertically upstanding members **86** and **87** where member **86** is of lesser length than **87**. Also disclosed are a triad of horizontally disposed members **91, 92** and **93**. It may thus be seen that the horizontally extending member **86** overlaps horizontally extending member **91** for reinforcing purposes. It may also be understood that the loop-like reinforcing member **85** may be formed from a single length of bar or wire stock.

The method according to the invention comprises erecting a building structure having a pair of wall-like structures defining an opening. The integral precast unitary lintel-balcony construction unit, according to the invention, is provided for spanning the wall-like structures. That structure is positioned across the opening defined by the wall-like structures. Thereafter, an integral precast floor slab construction is provided in a load-bearing relationship with the unitary structure **10**. A portion of the floor slab is then secured as by welding to a portion of the unitary construction **10** to secure the floor to the balcony slab. When the floor slab is being positioned, a shim may be inserted between the floor and the slab. With the balcony and floor deck securely fastened, the weldment serves to resist the rotational moment caused by the weight of the balcony itself and any loads thereon.

I claim:

1. A precast, monolithic combination lintel-balcony construction unit for use in a building structure to provide a balcony for a given floor and a lintel for an opening beneath said given floor, comprising:

a lintel having a length sufficient to span said opening in said building structure, said lintel including an outer surface, a lower face, and an inner surface,

a deck member integral with said lintel and including an outer end portion and an inner end portion, said deck member extending outwardly from said lintel portion along the length of said lintel, said inner end portion of said deck slab including an inner surface defining a plane which is outwardly spaced from the inner surface of the lintel,

said lintel further including a load-bearing surface interconnecting said inner surface of said deck member and said inner surface of said lintel,

connecting means on said construction unit disposed in proximity to the inner end portion of the deck member and the inner surface of the deck member and adapted to be secured to a portion of said building structure which may be placed upon said load bearing surface,

first reinforcing means in tension within said deck slab for reinforcing said deck slab, and

second reinforcing means comprising wire mesh disposed within said deck slab adjacent said outer surface thereof, said second reinforcing means providing added strength to said deck slab.

2. The construction unit as defined in claim **1** wherein said lower face includes a pair of spaced apart header surfaces, and a third header surface interconnecting one of said pair of said header surfaces to the other of said pair of said header surfaces, said third header surface defining a channel for receiving a header member.

3. The construction unit as set forth in claim **2** further including a header member disposed in said channel.

4. The construction unit as set forth in claim **3** wherein said header member is adapted to receive a lathing member.

5. The construction unit as defined in claim **1** wherein said deck member is constructed so that a point on the edge of said outer surface is further from said inner surface than all other points on the edge of said outer surface.

6. The construction unit as defined in claim **5** wherein said first reinforcing means in tension comprises a plurality of spaced members disposed within said balcony portion in a direction generally transverse to said length of said lintel portion.

7. The construction unit as defined in claim **6** wherein said spaced members are substantially the same length.

8. The construction unit as defined in claim **1** wherein said connecting means include a connecting member secured to said first reinforcing means, said connecting member being exposed at said inner surface of said deck member for securing said connecting means to a portion of said building structure.

9. In combination, a precast, monolithic combination lintel-balcony construction unit for use in a building structure to provide a balcony for a given floor and a lintel for an opening beneath said given floor, comprising:

a lintel having a length sufficient to span said opening in said building structure, said lintel including an outer surface, a lower face, and an inner surface,

a deck member integral with said lintel and including an outer end portion and an inner end portion, said deck member extending outwardly from said lintel portion along the length of said lintel, said inner end portion of said deck slab including an inner surface defining a plane which is outwardly spaced from the inner surface of the lintel,

said lintel further including a load-bearing surface interconnecting said inner surface of said deck member and said inner surface of said lintel,

connecting means on said construction unit disposed in proximity to the inner end portion of the deck member and the inner surface of the deck member

and adapted to be secured to a portion of said building structure which may be placed upon said load-bearing surface,

first reinforcing means in tension within said deck slab for reinforcing said deck slab, and

second reinforcing means comprising wire mesh disposed within said deck slab adjacent said outer surface thereof, said second reinforcing means providing added strength to said deck slab,

a building wall construction defining an opening, said construction unit being positioned so that said lintel spans said opening, and

a precast concrete floor slab arranged to form a floor in said building structure at approximately the same level as said balcony, an end portion of said floor including a first surface disposed adjacent said inner surface of said deck member, and a second surface resting in a load-bearing relationship upon said load-bearing surface of said lintel.

10. The building structure as defined in claim **9** wherein said floor slab includes attaching means cooperating with said connecting means of said construction unit for securing said construction unit to said floor slab.

11. The building structure as defined in claim **10** wherein said connecting means of said construction unit include a connecting member secured to said reinforcing means, said member being exposed at said inner surface of said deck member, and wherein said attaching means include an attaching member fixedly secured to said floor slab, said attaching member being disposed adjacent said connecting member of said construction and being secured thereto.

12. The building structure as defined in claim **11** and further including a welding member in juxtaposition with and secured to both of said connecting members and at least one of said attaching members.

13. A building construction comprising a precast, monolithic, combination lintel-balcony construction unit which includes a lintel portion having a load-bearing surface thereon for receiving a member in a load-bearing relationship, and a deck slab portion having a surface thereon which includes an attachment means as a part thereof.

14. The building construction as defined in claim **13** further including a precast floor slab having a surface thereon which includes an attaching means forming at least part of said surface, said floor slab being positioned upon said load-bearing surface of said lintel portion, and means securing said deck slab portion to said floor slab portion.

15. A building construction as defined in claim **14** wherein means for securing said deck slab to said floor slab including a welding member secured therebetween and welded to each of said attachment means.

16. A building construction unit as defined in claim **15** wherein each of said floor slabs and said deck slab includes a reinforcing member disposed within said slab.

17. The method of erecting a building structure having balconies and access thereto comprising the procedural combination of steps of:

(a) constructing a pair of wall-like building structures defining an access opening to a balcony on a first floor and having a predetermined span;

(b) positioning an integral precast construction unit having a deck portion and a lintel portion in such a manner that said lintel portion spans said access opening to provide a lintel therefor and so that said deck portion extends generally horizontally from said construction unit;

(c) positioning an integral precast floor slab so that at least a portion of one surface thereof is in a load-bearing relationship with a surface of said lintel portion of said integral precast construction unit; and

(d) securing said deck portion to said floor slab.

18. The method as defined in claim **17** wherein the step of securing comprises the step of welding a metallic element within said deck slab to a metallic element within said floor slab.

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JOHN E. MURTAGH, Primary Examiner

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Disclaimer and Dedication

3,487,597.—*Tadius J. Gutt*, Independence, Ohio. INTEGRAL PRECAST CONCRETE LINTEL-BALCONY COMBINATION. Patent dated Jan. 6, 1970. Disclaimer and dedication filed July 27, 1970, by the assignee, *Cleveland Builders Supply Company.*

Hereby enters this disclaimer to all the claims of said patent and dedicates the entire term of said patent to the Public.

[*Official Gazette November 3, 1970.*]