

UNITED STATES PATENT OFFICE.

FRANK R. HAHN, OF DECATUR, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGN-MENTS, OF FIFTY-ONE AND TWO-THIRDS PER CENT TO W. P. LANDON, OF ROCHELLE, ILLINOIS, AND FIFTEEN PER CENT TO A. G. CLARK. OF ST. PAUL, MIN-

BUILDING CONSTRUCTION.

1,416,709.

Specification of Letters Patent. Patented May 23, 1922.

Original application filed March 2, 1917, Serial No. 151,906. Divided and this application filed February 7, 1919. Serial No. 275,566.

To all whom it may concern:

Be it known that I, FRANK R. HAHN, a citizen of the United States, residing at

- Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Building Constructions, of which the following is a specification.
- My invention relates to improvements in 10 building construction and more particularly to a peculiar form of unit especially adapted for small structures such as garages, conservatories, pantries, farm buildings and the like, which are usually auxiliary to main build-
- 15 ings or structures, these structures being comparatively light and having a comparatively small amount of weight above.

The principal object of this invention is

- the provision of such a construction composed of a plurality of elements or units 20 formed or cast of cement, concrete or other
- 25 the structure may be erected for temporary or permanent purposes, the elements being securely locked and held together.

Another object of this invention is the provision of a slab member of comparatively thin construction and arranged to interfit 30 with other slabs, each slab having extensions located near the interfitting ends thereof which are adapted to cooperate with corre-

sponding extensions on the adjacent slabs so as to form a substantially hollow column 35or post which may be utilized to receive a temporary securing means or which may be filled with cement, concrete or other suitable plastic material in the event that the 40 building is to be permanent.

To the accomplishment of the foregoing and such other objects as may hereinafter appear my invention consists in the construction, combination and arrangement of parts

45 hereinafter described and then sought to be defined in the appended claims, reference being had to the accompanying drawing forming a part hereof and which shows trated in Fig. 2, whereby the adjacent slabs merely for the purpose of illustrative dis-

closure a preferred embodiment of my in- 50 vention, it being expressly understood however that various changes may be made in practice within the scope of the claims without digressing from my inventive idea.

55

In the drawings

Fig. 1 is a perspective view from the inside of the corner of a structure composed of a plurality of elements embodying my invention.

Fig. 2 is a perspective view of one of the 60 elements shown in Fig. 1 and the end portion of the next adjacent element.

Figure 3 is a detail plan view of a corner of the wall.

In building operations, it has quite often 65 been found advisable and desirable to erect additional or auxiliary structures of comparatively small height and weight, which do not have to be as substantial or as well built as main structures, examples of such 70 suitable plastic material and arranged to be structures are sheds, garages, pantries and assembled and held together to form a com- buildings of that sort, and usually the cost plete structure, provision being made so that is a considerable item. To accomplish the erection of such a structure at a minimum cost I have devised a construction illustrated 75 in this application which will serve the required purposes, being of sufficient strength and rigidity.

Referring now to the drawings, the numeral 1 designates a slab or unit constructed 80 to embody my invention, it being expressly understood that this form and shape of unit is disclosed merely to illustrate my invention, and that the same may be carried out by means of slabs or units of various other 85 forms, shapes and sizes. This slab or unit 1 is preferably provided along one side with a groove 2 and on the other side with a corresponding tongue 3 so that adjacent slabs or units will interfit along their top 90 and bottom edges. At each end of the slabs or units I provide a reduced portion 4 and headed portion 5 which are arranged to interfit with a corresponding headed por-tion 5' and reduced portion 4' on the adja- 95 cent ends of the next slab or unit, as illusor units are securely locked and connected

the same at the corners except that the re- tension projecting therefrom, the flanges and duced portion is made in the form of steps extensions at adjacent ends of adjacent slabs 7 and 8 with the head 9 on the end, this 5 fitting with a correspondingly and complementary shaped end part on the interfitting corner slab or unit.

2

Adjacent the end of each of these slabs or units I provide the inwardly extending 10 flange 10 having the right angled flange 11, those on adjacent units being adapted to cooperate, as clearly shown in Fig. 1, in the assembled wall to form a hollow post or column 12. The same idea is utilized at the 15 corner but merely by the formation of the laterally extending flange member 13 near the end of each of the corner slabs or units which will cooperate with the adjacent flange to provide the hollow corner post or 20 column 14, as clearly shown in Fig. 1.

When the structure is erected for temporary purposes the same may be assembled by the use of the bottom plate 15, and the top plate 16 connected by the elongated bolt or 25 rod 17, connected at one end by the loop 18 and at the other end by nut 19. This merely exemplifies one form of means whereby the structure may be readily dissembled when it is desired to take the same down. The 30 construction forms a post and a connecting web at each vertical series of units or slabs and as the posts are hollow, they may be filled with any suitable material if desired. Also, while reinforcing rods or wires 21 are

35 illustrated in Figure 2 of the drawings, any other suitable reinforcement may of course be employed.

In addition to the interlocking ends of the slabs, I may utilize additional securing 40 means including hook members 20 which engage the parts 21 of reinforcing rods or wires which are exposed by recesses 22 in the flanges 10. One or both of these securing means may be used, as desired.

It is, therefore, seen that I have provided 45 means for erecting structures composed of various pre-cast units which are strong and rigid, without the necessity of utilizing separate studs, posts or the like and which 50 may be built temporarily or knocked down, and which may be built for permanent purposes.

This application is a division of an application filed by me on the 2nd day of March, 55 1917, bearing Serial No. 151,906 for concrete

building construction. Having described my invention, what I claim is:-

1. A construction of the character de-60 scribed for forming a single wall construction, including in combination a plurality of units, each unit being composed of a single body web for forming the inside and outside of the wall, each unit having a flange extend-65 ing laterally and inwardly near each end

together. This construction is substantially thereof, each flange having a right angle excooperating to provide a hollow post or column.

2. A construction of the character described for forming a single wall construction, including in combination a plurality of units, each unit being composed of a single body web for forming the inside and outside 75 of the wall, each unit having a flange ex-tending laterally and inwardly near each end thereof, each flange having a right angle extension projecting therefrom, the flanges and extensions at adjacent ends of adjacent so slabs cooperating to provide a hollow post or column, and means extending through said hollow post or column and connected thereto for temporarily securing said units into an integral structure.

3. A construction of the character described for forming a single wall construction, including in combination a plurality of units, each unit being composed of a single body web for forming the inside and outside 90 of the wall, each unit having a flange extending laterally and inwardly near each end thereof, each flange having a right angle extension projecting therefrom, the flanges and extensions at adjacent ends of 95 adjacent slabs cooperating to provide a hollow post or column, said flanges being provided with engagement members and an engaging member adapted to connect said engagement members of opposed flanges for 100 securing the units together.

4. A construction of the character described for forming a single wall construction, including in combination a plurality of units, each unit being composed of a sin- 105 gle body web for forming the inside and outside of the wall, the ends of said units being formed so as to interfit with adjacent ends of adjacent units so as to lock the units together, each unit having a flange mem- 110 ber extending laterally and inwardly near each end and arranged to cooperate with the corresponding flange member near the adjacent end of the adjacent unit to form a hol-115low post or column.

5. A construction of the character described for forming a single wall construction, including in combination a plurality of units, each unit being composed of a single body web for forming the inside and out- 120 side of the wall, the ends of said units being formed so as to interfit with adjacent ends of adjacent units so as to lock the units together, each unit having a flange member extending laterally and inwardly near each 125 end and arranged to cooperate with the corresponding flange member near the adjacent end of the adjacent unit to form a hollow post or column, engagement members provided in said flanges and an engaging mem- 130

70

ber adapted to connect the opposed engagement members of opposed flanges of adjacent units.

6. A building unit of the character de-5 scribed for forming a single wall construction, including in combination a single web body having a flange extending inwardly and laterally near one end, said flange having a right angle extension, said unit hav-

- 10 ing at its other end, which is adapted to form the corner end of the building, a laterally extending flange, said last mentioned flange being adapted to cooperate with a similar flange of an adjacent corner unit,
- 15 and said first mentioned flange and extension being adapted to cooporeate with a similar flange and extension at the adjacent end of an adjacent unit whereby hollow posts or columns may be provided both at
 20 the corner and various other parts of a wall
- constructed of a plurality of said units.

7. A building unit of the character described for forming a single wall construc-

tion, including in combination a single web body having a flange extending inwardly 25 and laterally near one end, said flange having a right angle extension, said unit having at its other end, which is adapted to form the corner end of the building, a laterally extending flange, said last mentioned flange 30 being adapted to cooperate with a similar flange of an adjacent corner unit, and said first mentioned flange and extension being adapted to cooperate with a similar flange and extension at the adjacent end of an ad- $_{35}$ jacent unit whereby hollow posts or columns may be provided both at the corner and various other parts of a wall constructed of a plurality of said units, said units being also provided at each end with a reduced portion 40 and a headed portion adapted to interfit with complementary reduced and headed portions on the end of the adjacent unit. In testimony whereof I hereunto set my

hand.

FRANK R. HAHN.