March 24, 1936. P. C. WICHMANN 2,034,851

PRECAST CONCRETE CRIBBING

Filed July 19, 1934 2 Sheets-Sheet 1

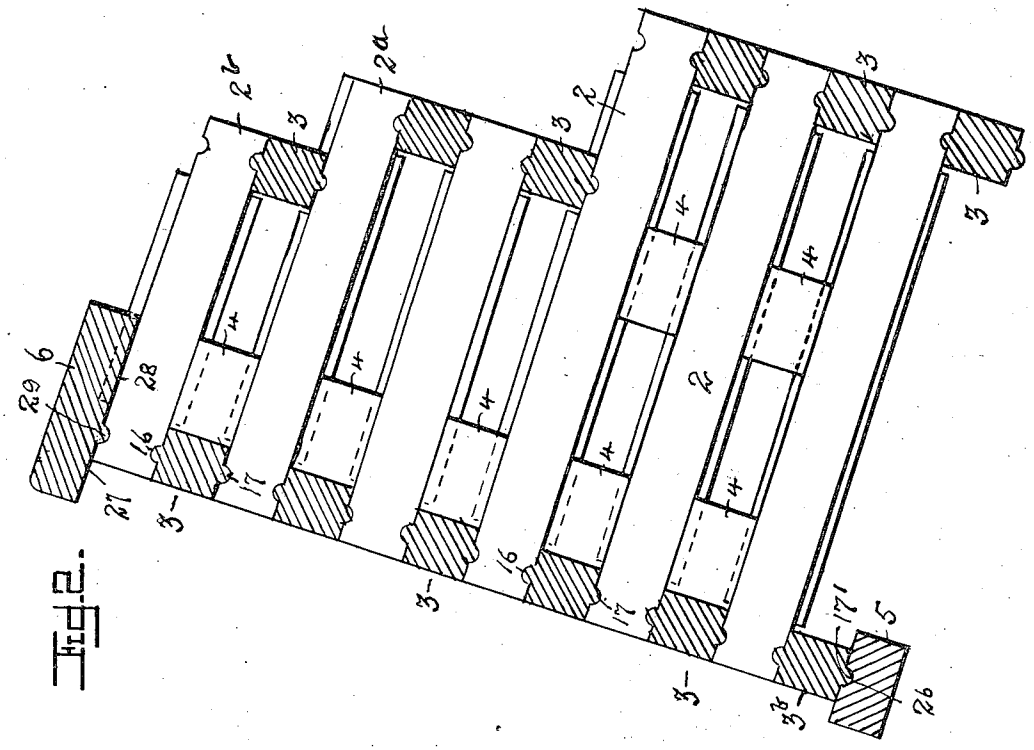

Fig. 2.

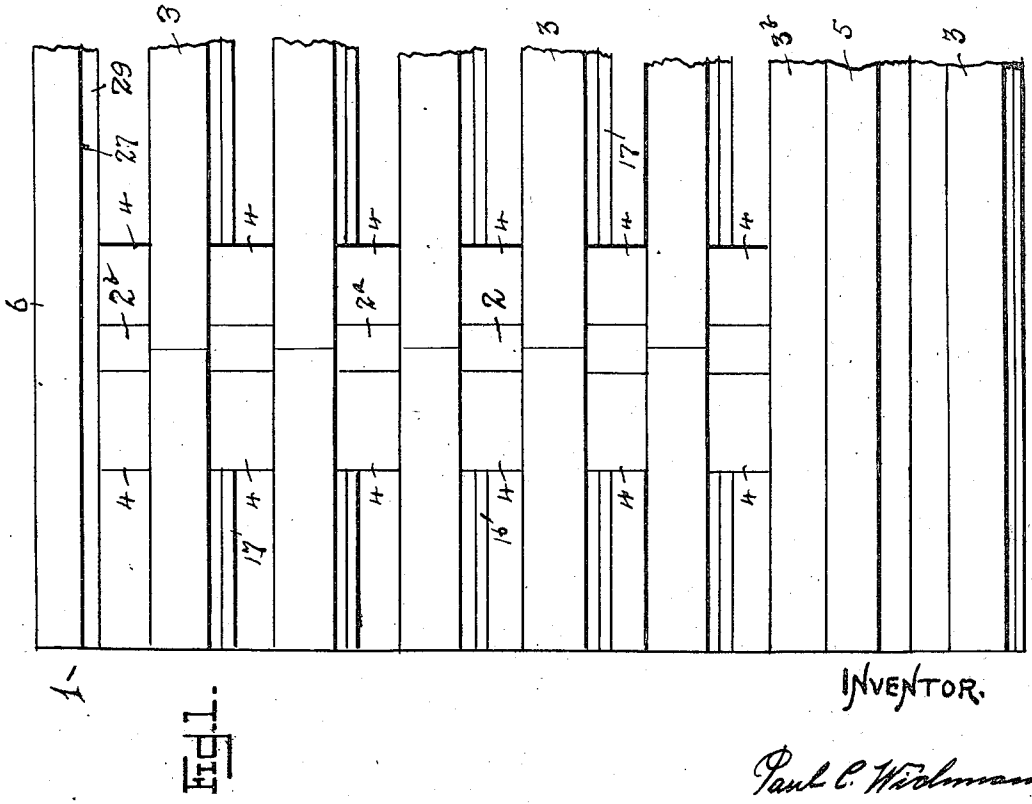

Fig. 1.

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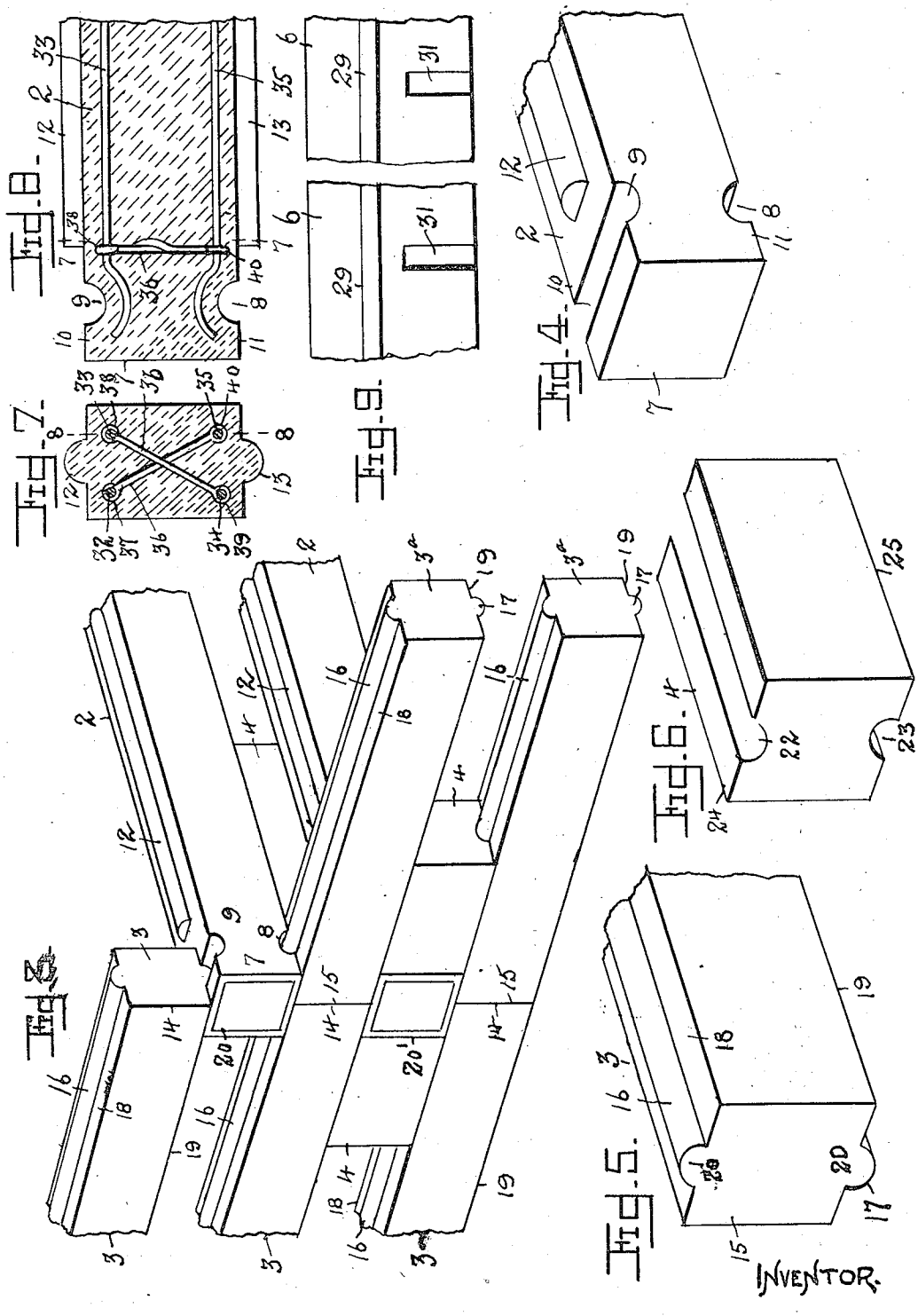

Fig. 8.

Fig. 9.

Fig. 4.

Fig. 7.

Fig. 6.

Fig. 2.

Fig. 5.

INVENTOR.

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PRECAST CONCRETE CRIBBING

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Application July 19, 1934, Serial No. 735,909

8 Claims. (Cl. 61—47)

This invention relates to improvements in building structures, and has for its object to provide a flexible inter-locking columnar crib wall with pillared superstructure.

Another object of the invention is to provide a set of precast units for forming a pillaring assembly for crib walls.

A further object of the invention is to provide a set of reinforced interlocking crib wall forming units.

With the above and such other objects in view, as may hereinafter more fully appear, I have invented the device shown in the accompanying drawings, in which:

Figure 1 is a front elevational view of my invention, partly broken away;

Figure 2 is a side elevation thereof, partly in section;

Figure 3 is a perspective view of the pillaring assembly in set up position;

Figure 4 is a detail perspective view of a header unit, partly broken away;

Figure 5 is a similar view of another stretcher unit;

Figure 6 is a similar view of a pillar unit;

Figure 7 is a transverse sectional view of the header unit;

Figure 8 is a section on line 8—8 of Figure 7; and

Figure 9 is a bottom plan view of a coping member partly broken away.

Like reference characters indicate like parts, throughout the following specification, and in the several views in the drawings in which 1 indicates a flexible, interlocking columnar crib wall, with pillared superstructure, formed according to my invention. In this form of the invention the structure is formed stepped through the use of headers 2, 2*a* and 2*b* of different lengths. The superstructure is formed of said headers 2, stretchers 3, fillers 4, base stretchers 5, and coping members 6. The several members, above referred to, are all interlocking and are formed in the following manner: The headers 2 have their ends 7 provided with transverse grooves 8 and 9 on the upper and lower surfaces 10 and 11. These headers are cast with tongues 12 and 13, longitudinally of said upper surfaces, but terminating short of said ends 7, to permit the joint ends 14 and 15 of the stretcher blocks 3 and 3*a* to seat on said end 7. The stretchers 3 are provided with longitudinal tongues 16 and 17, on the upper and lower surfaces 18 and 19 respectively, which tongues extend the entire length of the stretchers, and the terminals 20 and 20′ of the stretcher tongues being engaged by the grooves 9 of a header member 2, while the terminals 21 and 21′ seat in the groove 8 of the header 2, thus, the stretcher and headers are built up in interlocking relation. Filler blocks 4 of any desired length are provided with longitudinal grooves 22 and 23, throughout their length, and on their upper and lower surfaces 24 and 25, which grooves receive the tongues 16 and 17, respectively, whereby said fillers are in interlocking relation with the stretchers. The same filler blocks are used as spacing fillers between the headers 2 and 2*a*, in which latter case the upper and lower tongues 12 and 13 respectively, of the headers engage the grooves of the fillers. The blocks 5, for the base course, are of greater width than the stringers and headers and are provided with a longitudinally disposed groove 26 to receive the tongues 17′ of the lower stringers 3*b*. The lower surface 27 of said members 6, being flat to seat on any suitable foundation 28. The coping stringer 6, is, of considerably greater width than the headers 2, and stringers 3, with a longitudinal tongue 29 in the lower surface 30 thereof, to seat in the upper groove 8 of the uppermost header 2*c*. These members 6 are also provided with suitably spaced apart transverse grooves 31, extending substantially halfway across the width of the coping members, which latter grooves are adapted to receive the upper tongues 12′ of the headers 2*c*, whereby the upper headers, stringers, and coping blocks are interlocked together. Any desired number of fillers may be used between the courses of headers and stringers, even to the extent of forming solid walls, when desired. All of said members 2, 3, 4, 5 and 6 are formed of reinforced concrete, preferably, the reinforcing being substantially the same in all members as in the header shown in longitudinal and cross sections in Figures 7 and 8, and in which longitudinal wires 32, 33, 34, and 35, held connected by wires 36, having eyes 37, 38, 39 and 40, at their respective corners, and through which said first wires pass, and are held spaced apart from the casting.

From the foregoing it will be seen that I have designed a structure which can be rapidly set up by any novice and in which the several units are securely interlocked; that the structure is flexible to any desired extent, and can be made with a pillared superstructure.

Having described my invention, that which I claim to be new and desire to procure by Letters Patent is:

1. A crib structure consisting of a plurality of interlocking units including headers, stretchers, and fillers, a base course and a coping interlocking with certain of said members, said headers having transverse grooves adjacent their ends, tongues on the upper and lower sides of said stretchers, said grooves being on the upper and lower ends of said headers, said headers having longitudinal upper and lower tongues between the grooved ends thereof, said fillers having upper and lower longitudinal grooves to be engaged by the opposing tongues of said stretchers, and the opposing tongues of said headers, stretchers, and fillers being formed of reinforced concrete.

2. The device as claimed in claim 1, said reinforcements comprising four longitudinal rods in each of said members, and transverse connectors having eyes through which said rods project.

3. The device as claimed in claim 1, said reinforcements comprising four longitudinal rods in each of said members, and transverse connectors having eyes through which said rods project, said rods of said headers being curved adjacent the grooves thereof.

4. A crib structure consisting of a plurality of interlocking units including headers, stretchers, and fillers, a base course and a coping interlocking with certain of said members, said headers having transverse grooves adjacent their ends, tongues on the upper and lower sides of said stretchers, said grooves being on the upper and lower ends of said headers, said headers having longitudinal upper and lower tongues between the grooved ends thereof, said fillers having upper and lower longitudinal grooves to be engaged by the opposing tongues of said stretchers, and the opposing tongues of said headers, stretchers and fillers being formed of reenforced concrete, said headers being of graduated length to step said structure.

5. The device as claimed in claim 4, the upper heads having upstanding tongues and said coping having recesses to receive said last tongues.

6. A crib structure including a plurality of interlocking headers, stretchers and fillers, said headers having transverse grooves adjacent their ends, tongues on said stretchers to engage said grooves, longitudinal upper and lower tongues on said headers between the grooved ends thereof, said fillers having grooves to be engaged by said last tongues or the tongues of said headers.

7. In a crib structure interlocking headers, stretchers, and fillers, transverse grooves on said headers, longitudinal tongues on said stretchers to seat in said grooves, longitudinal tongues on said headers and longitudinal grooves in the fillers to receive the tongues of the headers or of the stretchers.

8. The device as claimed in claim 7, and said header grooves adapted to receive tongues of two pairs of said stretchers.

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