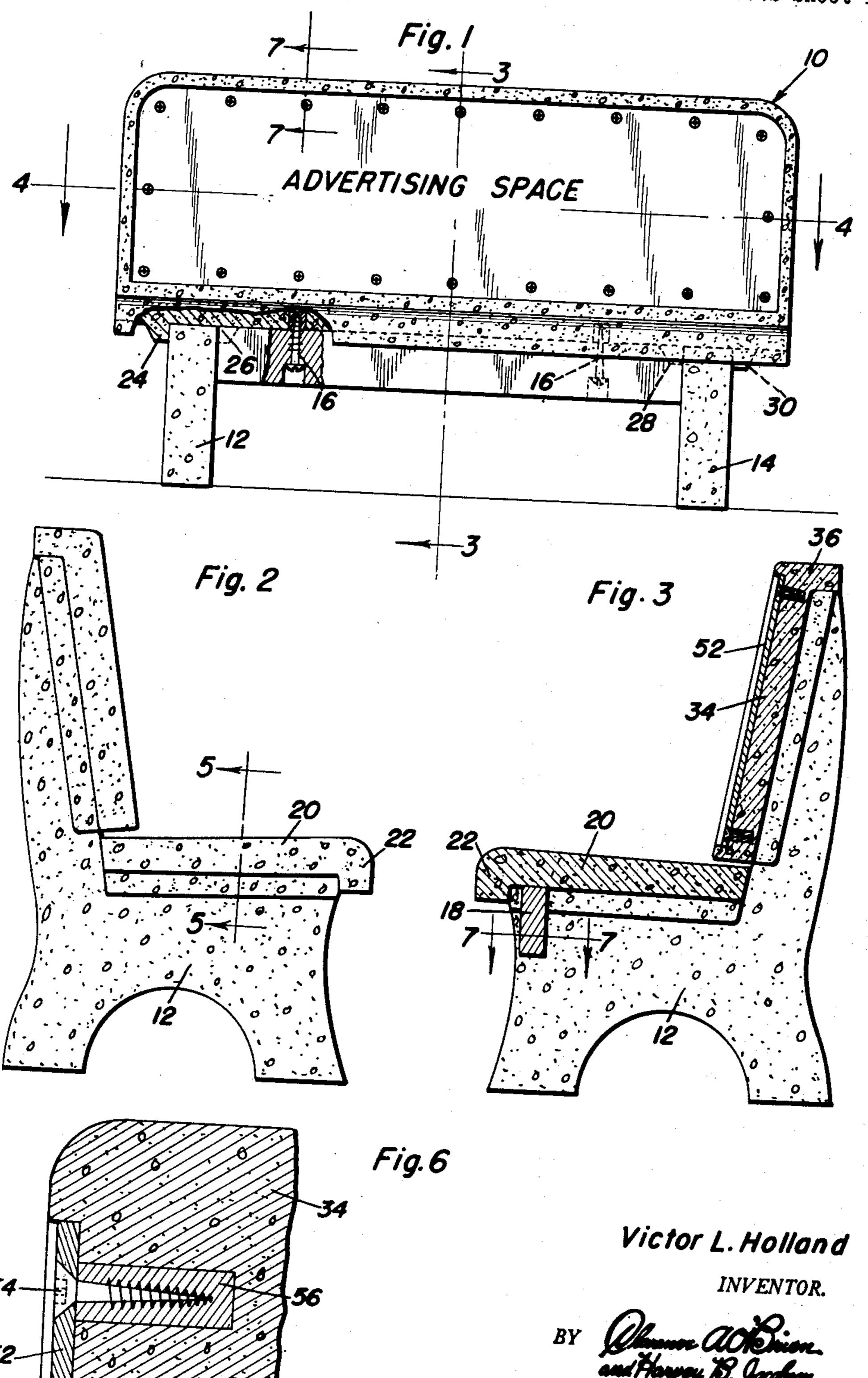
INTERLOCKING PRECAST CONCRETE BENCH

Filed June 22, 1950

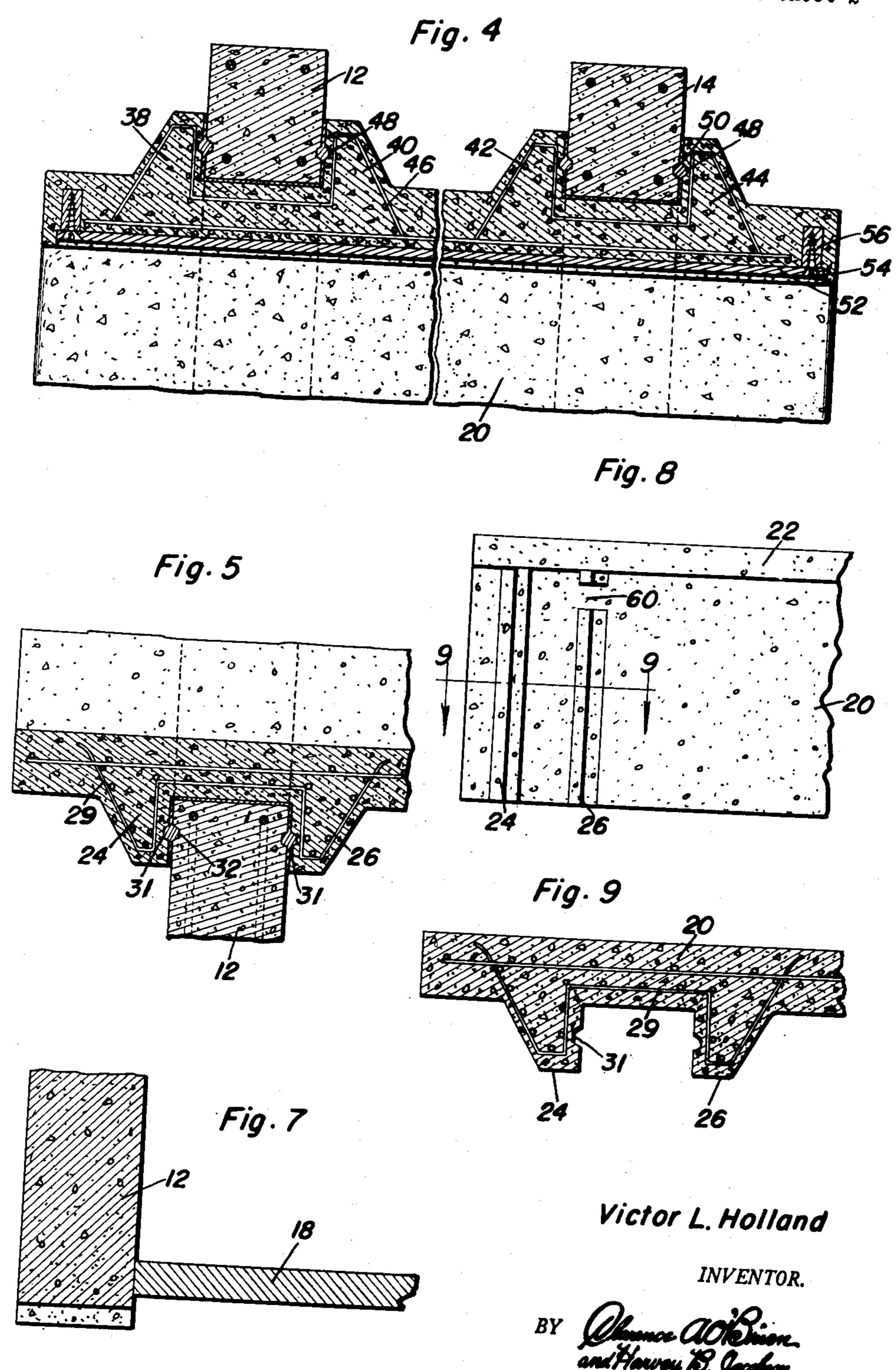
2 Sheets-Sheet 1



INTERLOCKING PRECAST CONCRETE BENCH

Filed June 22, 1950

2 Sheets Sheet 2



## UNITED STATES PATENT OFFICE

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## INTERLOCKING PRECAST CONCRETE

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6 Claims. (Cl. 155—196)

This invention relates to articles of out-door furniture, and more particularly to an interlocking pre-cast bench adapted to support a panel on which advertising or other matter may be suitably affixed.

An object of this invention is to provide a precast interlocking concrete bench which is made from a minimum number of parts and which may be easily erected remote from the place of the casting of the various elements thereof.

A further object of this invention is to provide a pre-cast concrete bench having a back member on which suitable advertising space may be readily obtained by the use of a metallic plate on which the advertising matter may be 15 affixed or printed.

Still further objects of this invention reside in the provision of a pre-cast interlocking concrete bench that is strong, durable, highly efficient in operation, simple in construction and 20 manufacture, and which is relatively inexpen-

These, together with the various ancillary objects of the invention which will become apparent as the following description proceeds, are attained by this interlocking pre-cast concrete bench, a preferred embodiment of which has been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a front elevational view of the bench comprising the present invention, parts thereof being broken away to show other parts in greater detail;

Figure 2 is a side elevational view of the device comprising the present invention;

Figure 3 is a vertical sectional view as taken along line 3—3 in Figure 1;

Figure 4 is an enlarged horizontal sectional view as taken along line 4—4 in Figure 1;

Figure 5 is a partial vertical sectional detail as taken along line 5—5 in Figure 2;

Figure 6 is an enlarged sectional detail showing the manner in which the metallic plate on which the advertising matter is to be affixed is secured to the back member of the present invention;

Figure 7 is a horizontal sectional detail as taken along line 7—7 in Figure 3, which view is enlarged to show the elements in greater detail;

Figure 8 is a bottom plan view of the seat 50 member comprising one element of the present invention; and

Figure 9 is an enlarged vertical sectional view of a portion of the seat member as taken along 9-9 in Figure 8.

With continuing reference to the accompanying drawing, wherein like reference numerals designate similar parts throughout the various views, the reference numeral 10 generally designates this interlocking pre-cast concrete bench comprising the present invention. This bench includes a pair of pre-cast concrete buttresses 12 and 14 of suitable configuration. Suitable countersunk screws 16 secure a bar 18 in abutting engagement with the buttresses. Positioned on the buttresses and engaging the bar 18 is a seat member 20 which is provided with an overhanging lip 22 having a rounded corner in order that a person may seat comfortably on the bench.

The seat member 20 is provided with aligned, substantially parallel pairs of projecting tongues 24 and 26 and 28 and 30 which encompass the buttresses 12 and 14 in an interlocking manner. As shown best in Figure 5, the seat member is provided with suitable reinforcing rods 29 and is also provided with mortar grooves 31 in the projecting tongues for alignment with mortar grooves 32 formed in the buttresses 12 and 14. A suitable mastic, such as mortar or the like, is positioned in the mortar grooves in order that the seat member may be rigidly locked to the buttresses.

A back member 34 is provided which has an overhanging lip 36 for engagement with the upper edge of the buttresses 12 and 14. Further, the back member is provided with substantially parallel, aligned projecting tongues 38, 40, 42 and 44 for interlocking and encompassing engagement with the buttresses 12 and 14. The back element 34 is suitably provided with reinforcing elements 46 and mortar grooves 48 are formed in the projecting tongues for alignment with mortar grooves 50 formed in the buttresses 12 and 14 so that a suitable mastic such as mortar may be poured therebetween for lockingly 40 holding the back member 34 to the buttresses 12

The front portion of the back member 34 is recessed for reception of a metal plate 52, which metal plate 52 may be formed from aluminum or other suitable metallic material. The metal plate 52 is held by suitable screws 54 threaded in lead inserts 56 formed in the back plate 34. On this metal plate, suitable advertising may be printed or may be affixed by suitable adhesive and since such plate is readily detachable another plate may be readily installed, thus permitting the bench to be used as an advertising means in addition to its other useful function.

As can be readily seen from an inspection of

Figure 8, suitable gaps 60 are formed in the projecting tongues 26 and 28 in order that the seat member 20 may be readily interlocked with the bar 18, thus insuring a substantially rigid con-

Since, from the foregoing, the construction and struction. advantages of this interlocking pre-cast concrete bench can be readily understood, further description is believed to be unnecessary.

However, since numerous modifications will 10 readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawings, it is not intended to limit the invention to the precise embodiment shown and described but all suitable modifica- 15 tions and equivalents may be readily resorted to which fall within the scope of the appended

Having described the invention, what is claims. claimed as new is:

- 1. A precast concrete bench comprising a pair of substantially parallel spaced concrete buttresses, a bar secured to and abutting said buttresses and extending therebetween, a reinforced concrete seat forming slab having pairs of spaced 25 parallel projecting tongues depending therefrom positioned on said buttresses, said projecting tongues straddling said buttresses, certain of said tongues having gaps formed therein receiving the ends of said bar, a back forming slab secured 30 to said buttresses and binding means between said tongues and said buttresses.
- 2. A precast concrete bench comprising a pair of substantially parallel spaced reinforced concrete buttresses, a bar secured to said buttresses 35 and extending therebetween, a seat forming slab having substantially aligned parallel projecting tongues depending therefrom positioned on said buttresses, said projecting tongues straddling said buttresses, said tongues having gaps formed 40 therein receiving the ends of said bar, said tongues and said buttresses having aligned mortar grooves, mortar in said grooves and locking said tongues to said buttresses, and a back forming slab secured to said buttresses.
- 3. A precast concrete bench comprising a pair of substantially parallel spaced reinforced concrete buttresses, a bar secured to said buttresses and extending therebetween, a seat forming slab having pairs of projecting tongues depending 50therefrom positioned on said buttresses, said projecting tongues straddling said buttresses, said tongues having gaps formed therein receiving the ends of said bar, and a back member secured to said buttresses, said back forming slab having 55projecting tongues depending therefrom straddling said buttresses.
- 4. A precast concrete bench comprising a pair of substantially parallel spaced buttresses, a bar secured to said buttresses and extending there- 60 between, a seat forming slab having first and second pairs of parallel projecting tongues depending therefrom positioned on said buttresses, said buttresses including horizontal edges re-

ceived between the tongues of each pair of tongues, said tongues having gaps formed therein receiving the ends of said bar, said tongues said buttresses having aligned mortar grooves, mortar in said aligned mortar grooves locking said tongues to said buttresses, and a back forming slab secured to said buttresses, said back forming slab having projecting tongues depending therefrom straddling said buttresses.

5. A precast concrete bench comprising a pair of substantially parallel spaced buttresses, a bar secured to said buttresses and extending therebetween, a seat forming slab having pairs of projecting tongues depending therefrom, said projecting tongues straddling said buttresses, said tongues having gaps formed therein receiving the ends of said bar, said tongues and said buttresses having aligned mortar grooves, mortar in said grooves locking said tongues to said buttresses, 20 and a back forming stab secured to said buttresses, said back forming slabs having projecting tongues depending therefrom straddling said buttresses, and a metal sheet secured to one side of said back forming slab adapted to have advertising material affixed thereon, said one side of said back-forming slab having a recess therein accommodating said metal sheet.

6. An interlocking precast concrete bench comprising a pair of reinforced concrete side members each having a horizontal upper edge and an arm rising from said upper edge, a seat forming slab extending between said side members, a pair of spaced parallel transverse ribs at each end of the seat forming slab and on the undersurface of said seat forming slab, the upper edges of said side members being received between the ribs, means permanently securing said ribs to said side members, a cross-bar extending between said side members and abutting said side members, fastening means securing said cross-bar to the underside of said seat forming slab, a back forming slab, pairs of spaced parallel ribs formed on said back forming slab receiving the arms therebetween, and means anchoring said arms 45 to said last named ribs.

## VICTOR L. HOLLAND.

## References Cited in the file of this patent UNITED STATES PATENTS

Number Name Dec. 9, 1	879
222,403 How Feb. 8, 1 948,770 Price Proce Proce Proce Proce Proce Proce Process Proce	910
	927
1,626,095 Ramsburg A11g 16. 1	927
1,639,085 Foney June 7, 1	932
1,862,382 Niatilia Oct. 4, 1	932
	7 A -A
	** - ·
$\Delta_{j} = \{0, 1, \dots, 1, \dots$	TAÑA
ATIV. IJ.	1950
2,518,532 Edwards	