Nov. 6, 1962 E. M. KLAUS 3,062,341

FORM SUPPORT

Original Filed Sept. 9, 1957 4 Sheets-Sheet 1

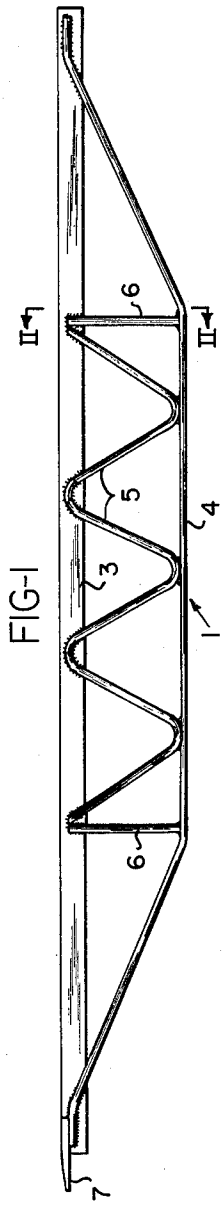


FIG-1

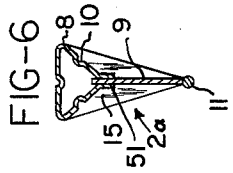


FIG-6

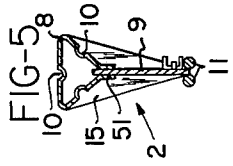


FIG-5

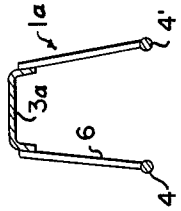


FIG-3

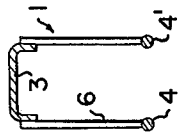


FIG-2

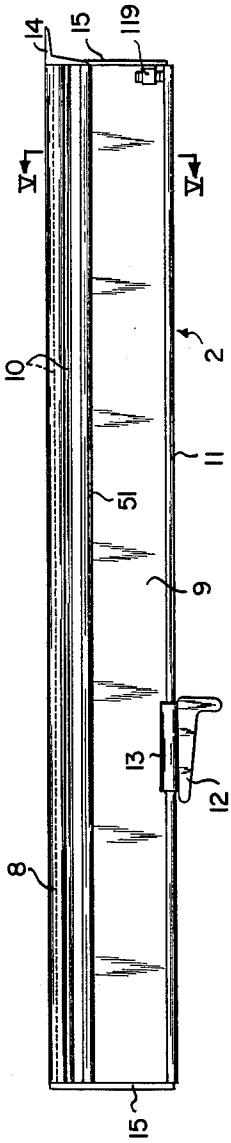


FIG-4

INVENTOR.

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FIG-7

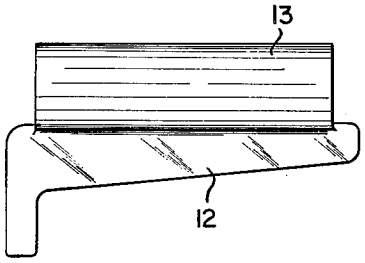


FIG-8

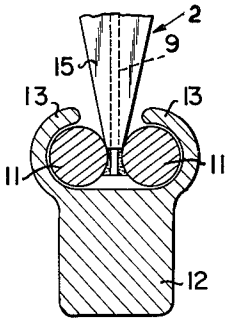


FIG-29

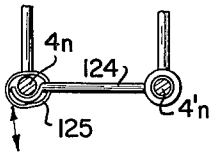


FIG-30

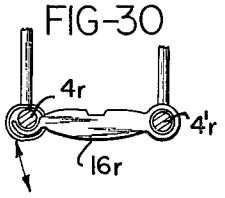


FIG-9

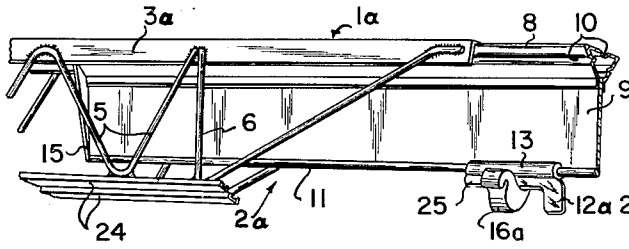


FIG-10

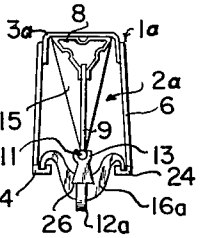


FIG-11

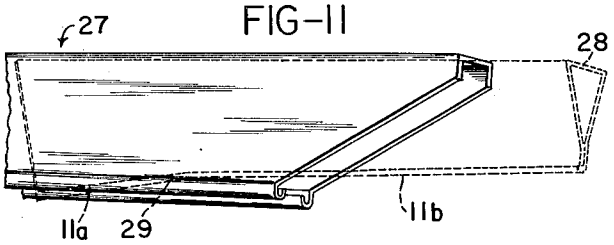


FIG-12

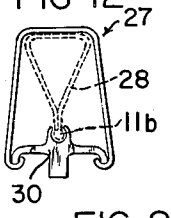


FIG-21

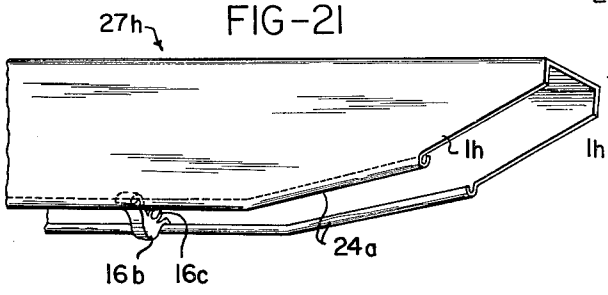
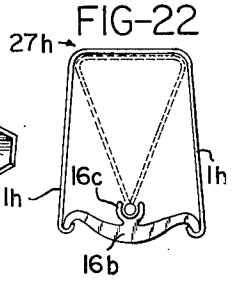


FIG-22



INVENTOR.

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FIG-26

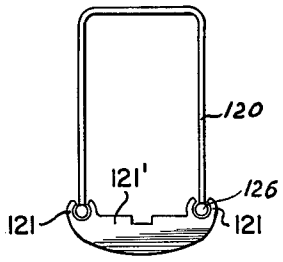


FIG-27

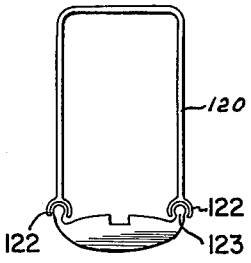


FIG-13

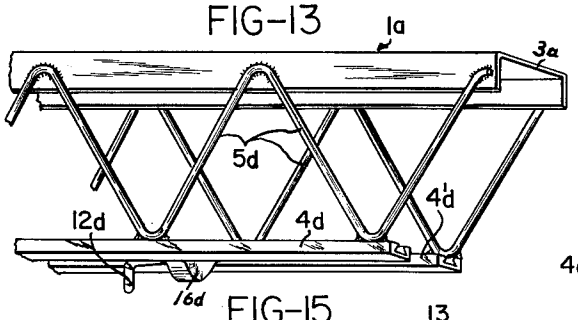


FIG-14

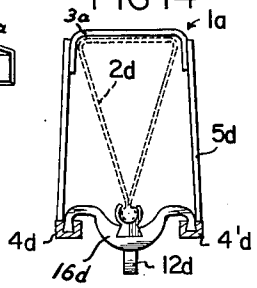
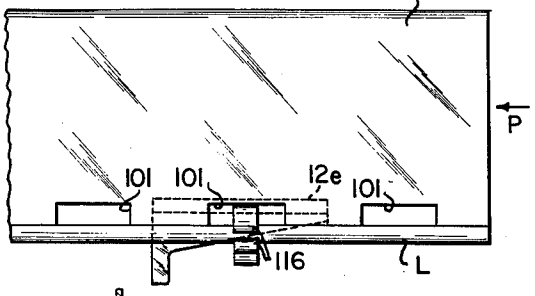


FIG-15



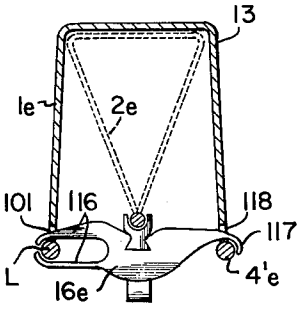


FIG-16

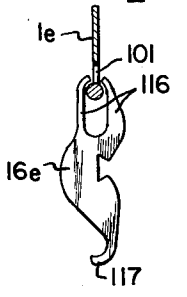


FIG-17

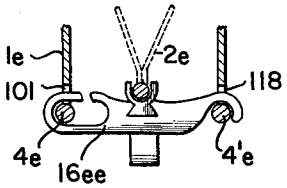


FIG-18

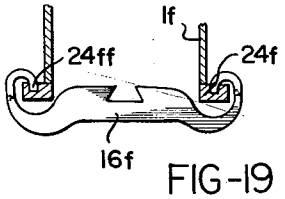


FIG-19

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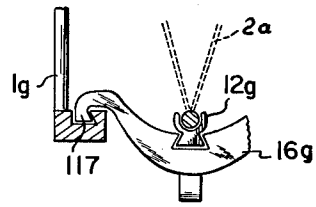


FIG-20

FIG-23

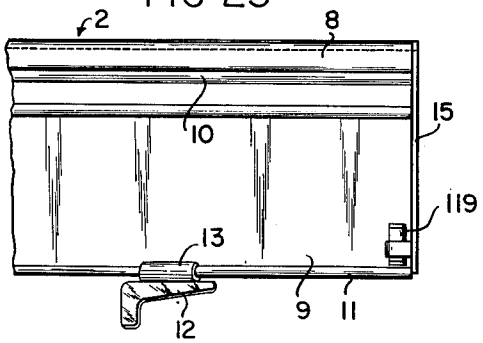


FIG-24

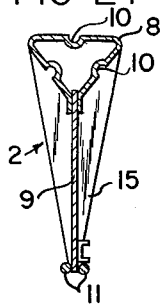
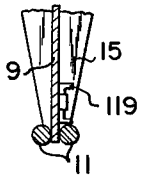


FIG-25



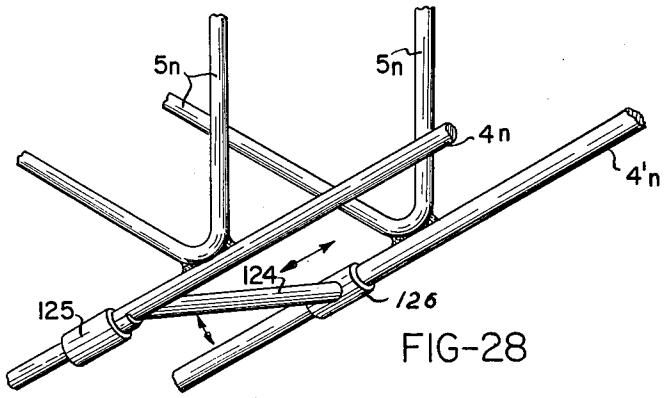


FIG-28

INVENTOR.
ERNST KLAUS
BY

United States Patent Office 3,062,341 Patented Nov. 6, 1962

3,062,341

FORM SUPPORT

Ernst Mathias Klaus, Dusseldorf, Germany, assignor to Betonbau G.m.b.H., Neuss, Rhineland, Germany

Original application Sept. 9, 1957, Ser. No. 682,951, now Patent No. 3,023,863, dated Mar. 6, 1962. Divided and this application Dec. 8, 1961, Ser. No. 158,078
Claims priority, application Germany Sept. 10, 1956
6 Claims. (Cl. 189—37)

The present invention relates to a form support composed of a plurality of girder members which are slidable within each other and are foldable relative to each other so that they can be lowered and which are designed in a box-like or flat manner and can be interlocked while the outer girder member in which the inner girder member is movable is open at the bottom. Generally two embodiments of form supports of this type are known. According to one of said known embodiments, the outer girder member has a rectangular box-shaped cross section of the ordinary lattice girder type with inclined ends as described for instance in U.S. Patents Nos. 1,651,032, 1,899,344, 1,964,208, and 2,626,-688. With this embodiment the inner girder members can be moved into the outer girder members from one side only or from both sides and the inner girder members are designed as vertical structural irons with a hood-like profiled reinforcement at the upper edge thereof. The outer girder member is open at the bottom but its lower chords are at both ends rigidly connected with each other by fixedly mounted bend-resistant bridge members so that the outer girder at those end portions has a closed cross section. The members are provided with threaded bores engaged by threaded bolts for locking the inner girder with regard to the upper chord of the outer girder. A similar way of interlocking the extensible girders to each other is known with girders in which the outer girder has a fixed bottom. The arrangement of fixed bridges or webs alone, i.e. without locking means is also known with self-locking girders for preventing the inner girder from being pulled out.

According to the second embodiment above referred to, the outer girder likewise represents a lattice girder with a rectangular cross section open at the bottom in which an inner girder is displaceably arranged. In contrast to the first mentioned embodiment, however, the outer girder is completely open at the bottom and the required abutments for the locking means in order to lock the inner girder against the outer girder are designed as loose individual elements which have to be inserted individually in a certain succession when the form support is being installed. This arrangement comprises a plate which serves as bridge member and which is to be connected to the legs of the outer girder by means of a separate bolt which is passed through openings and ears. A likewise loose wedge then together with an auxiliary element brings about the interlocking of the inner and outer girders.

This application is a division of my prior application Serial No. 682,951, filed September 9, 1957, now U.S. Patent No. 3,023,863.

The form supports of the above mentioned known type have the advantage that they can be folded so as to be lowered whereby the stripping of the form support is considerably facilitated. The first mentioned embodiment, however, has the drawback that the inner girder member cannot be removed downwardly from the outer girder member without, prior to the initiation of the actual removal operation carrying out a relative movement of the girder members with regard to each other. This is due to the fixed bridges and screws.

While the second embodiment allows a removal of the inner girder from the outer girder without a relative movement of these girders; prior to the initiation of the actual removal operation, it has the drawback that a number of loose individual parts are employed and have to be individually withdrawn before the dismantling or the removal of the inner girder from the outer girder can be effected. Thus, the first mentioned embodiment makes it necessary to strip the form support as a unit which means that the outer and inner girder members have to be removed together as a unit. Inasmuch as this work is to be carried out by hand, considerable weights are to be handled by the construction workers which has a harmful effect on the cost of labor and the time involved while at the same time bringing about the danger of accidents. With the last mentioned embodiment, the stripping as a unit would not be necessary, but the dismantling of the numerous individual parts causes so much time and effort that it is preferred to dismantle the outer and the inner girders as a unit.

It is, therefore, an object of the present invention to provide a girder of the above mentioned general type which will overcome the drawbacks encountered with the heretofore known girder constructions with removable inner girder.

It is another object of this invention to provide an improved form support with an outer girder open at the bottom and at least one inner girder movable in the latter and removable therefrom downwardly, in which the locking means for interlocking the girders are non-detachably connected thereto.

It is also an object of this invention to provide a form support of the type set forth in the preceding paragraph, in which the locking members will be free from threaded spindles and the like.

These and other objects and advantages of the invention will appear more clearly from the following specification in connection with the accompanying drawings, in which:

FIG. 1 is a diagrammatic representation of a side view of an outer girder member according to the invention.

FIG. 2 represents a cross section along the line II—II of the girder of FIG. 1.

FIG. 3 is a cross section of a girder somewhat modified over that of FIG. 1.

FIG. 4 diagrammatically illustrates a side view of an inner girder member according to the invention with a wedge pertaining thereto.

FIG. 5 is a cross section along the line V—V of the girder according to FIG. 4.

FIG. 6 is a cross section of an inner girder somewhat modified over that of FIG. 4.

FIG. 7 shows the movable wedge of FIG. 4 in side view and on a larger scale than that of FIG. 4.

FIG. 8 is a cross section through the wedge of FIG. 7 with the lower portion of the inner girder thereon shown in end view.

FIG. 9 is a perspective view of an embodiment having a modified outer girder according to the present invention.

FIG. 10 is an end view of the outer girder of FIG. 9.

FIG. 11 is a perspective view of an embodiment having a further modification of the outer girder according to the invention.

FIG. 12 is an end view of the embodiment of FIG. 11, with the inner girder shown in dotted lines.

FIG. 13 shows a perspective view of an outer girder member with the inner girder entirely removed.

FIG. 14 is an end view of the girder of FIG. 13 showing also a bridge member of a modified type engaged with the girder members by a cooperating wedge.

FIG. 15 shows in side view a modified outer girder engaged by a modified bridge member in locking position.

FIG. 16 illustrates, partly in section, an arrangement for the bridge-wedge connection at the lower chord of the outer girder of FIG. 15.

FIG. 17 is a further view of the bridge member of FIG.16, in unlocked position.

FIG. 18 shows a further modified form of bridge member.

FIG. 19 shows a further modified form of bridge member.

FIG. 20 is a detailed view of a further modified type of bridge member.

FIG. 21 is a perspective view of one end of an outer girder member.

FIG. 22 illustrates a modified bridge member in cooperation with an outer girder.

FIG. 23 is a side view of one end of an inner girder member, showing also a wedge member in cooperation therewith.

FIG. 24 is an end view of the inner girder of FIG. 23.

FIG. 25 is an end view partly in cross section, showing the details of the lower part of the inner girder of FIG. 23.

FIGS. 26 and 27 represent additional modifications of bridge member.

FIG. 28 shows a further modified bridge member.

FIG. 29 and FIG. 30 are end views showing two modifications of the type of arrangement shown in FIG. 28.

General Arrangement

The girder construction according to the present invention is characterized primarily in that each girder member displaceable within the outer girder member is provided with a non-detachable wedge means movable over substantially the entire length of the inner girder member or rests upon such wedge which is movable over the entire length of the outer girder member. In this way, the means for interlocking the outer and inner girders are permanently connected to the girder construction.

In order to allow the inner girder to be removed downwardly from the outer girder practically parallel thereto, i.e. without major folding and without having to move the inner girder along its entire length, according to the present invention the free legs of the outer girder member are interconnected by bend-resistant bridge members. These bridge members are non-detachably connected to the girder construction and, if desired, may be displaceable relative thereto and movable downwardly for completely opening the girder profile. The said bridges also serve as support of the wedge carried by the inner girder or resting thereagainst.

The invention is furthermore characterized in that any deformation of the legs of the outer girder especially the lower chords thereof will be prevented which is particularly favorable when transporting the girder construction. More specifically, the bridges interconnect the lower chords of the outer girder and at their ends are provided with fork-shaped portions for receiving a protrusion of the outer girder.

In conformity with a further development of the invention, for assuring a favorable guiding of the bridge member on the outer girder, the inner side of the lower chords of the outer girder are provided with groove-like guide means engaged from above by correspondingly shaped edge portions of the bridge member. This arrangement makes it possible to lock the wedge-bridge locking system at any desired point along the length of the outer girder by simple hammer blows.

In conformity with a further development of the invention, the wedge is movably but non-detachably mounted on the bridge which is movable over the entire length of the outer girder.

In conformity with another embodiment of the inventoin, the wedge and bridge members form a unit and may, for instance be forged as a single steel piece. If, with this

construction, in conformity with the invention, the inner girder has its lower side entirely or partly tapered, which may be effected in an analogous manner and as an alternative with the outer girder, the great advantage is obtained that the lever arm between that end of the outer girder from which the inner girder protrudes and the point of attack of the locking connection may be selected particularly long whereby the respective moment will be reduced so that higher loads can be supported.

Structural Arrangement

Referring now to the drawings in detail, and FIGS. 1, 2, 4 and 5 in particular, the form support shown therein primarily comprises an outer girder generally designated 1 and an inner girder generally designated 2. If desired, two inner girders 2, may be inserted respectively from each end into the outer girder 1 so that the total support would be a three-part support. There exists the further possibility to connect to each end of an inner girder 2 an outer girder 1 which on its other end again carries an inner girder so that multiple form supports will be formed with wide span. The outer girder consists for instance of a generally U-shaped upper chord 3 each leg of which has connected thereto and downwardly extending therefrom, a strut structure of round section iron, said strut structure being composed of lower chords 4, 4', inclined struts 5, and the vertical struts 6. One end of the outer girder 1 is provided with a bearing plate 7 connected to the upper chord 3. The inner girder 2 has a portion 8 formed of a triangular-shaped section iron with the ridge 51, of the triangular section portion 8 directed downwardly. A longitudinal girder iron 9 is flanged into the ridge 51 of the portion 8. The sectional portion 8 is adapted by means of the side edges of the triangular portion which are located on each side of the ridge 51 to slide in the inverted U-shaped interior of the upper chord 3 to rest thereon. Each side of the triangular-shaped sectional portion 8 has a rolled-in longitudinal groove 10 for purposes of stiffening the member 8.

The lowermost edge of the longitudinal girder iron 9 is reinforced over its entire length by one or two round profiled rods or rails 11 in conformity with the heretofore known structure as disclosed in U.S. Patent No. 1,651,032. In this instance the profiled rods 11, however, serve as sliding rails for the wedge 12 which has its upper surface rolled in form of a groove and which embraces the rails 11 with play by means of ears 13 so that the wedge 12 cannot be detached downwardly. One end of the inner girder 2 is provided with a supporting plate 14. The girder 2 may at the same end additionally be provided with a stud (not shown in the drawings) for lifting the bearing plate 14 out of the masonry work. This stud may, for instance, form a continuation of the end face of the girder 2 in downward direction in order to obtain a larger lever arm. This will also have the advantage that the main elements 1 and 2 of the form support which are slidable one within the other can with their supporting plates 7 and 14 be withdrawn from the masonry upon which they rest. Thus, the entire girder will when being stripped and when a certain tilting angle has been obtained drop by itself or can be particularly easily withdrawn by the workers carrying out the stripping or dismantling operation. The longitudinal displacement of the wedge 12 can at both ends of the rails 11 be limited by a simple abutment so that the wedge 12 cannot be lost. If desired, also a movable latch 119 (see FIGS. 4, 23 and 25) may be provided which has a nose adapted to move in front of the tongue 13 of the wedge 12 when the latter is in its locking position, whereby a withdrawal of the wedge is prevented. At each end surface of the inner girder 2 there is provided a closure sheet metal member 15 of narrow pointed shape.

The arrangement according to the invention contemplates the employment of a bridge member which is pref-

erably die forged and has the central portion of its upper side provided with a groove and a wedge-shaped base surface. This arrangement brings about that the locking with the inner girder 2 can be effected only when the wedge is located at approximately the central plane of the outer girder.

The basic structure described above in connection with FIGS. 1, 2, 4 and 5 is also found in the remaining FIGURES 3, 9, 10 to 16, 19 to 22, 26 and 27, in which outer girder is respectively designated with the reference numerals 1*a*, 1*g*, 1*f*, 13, 27, 27*h* and 120, while the inner girder in FIGS. 6, 9, 10, 11, 12, 14, 16 and 18 is respectively designated with the reference numerals 2*a*, 2*d*, 2*e* and 28. Similarly, the upper chord 3 in FIGS. 3, 9, 10, 13 and 14 is designated with the reference numeral 3*a*. The lower chords 4, 4' of FIGS. 1 to 3 are in the remaining FIGS. 9, 10, 13 to 16, 18, 19, 26, 27, 29 and 30 designated with the reference numerals 4*d*, 4'*d*, 4*e*, 4'*e*, 4*n*, 4'*n*, 4*r*, 4'r, 24, 24*f*, 122, 124 and L, respectively. In FIGS. 13 and 24, the inclined struts have been designated with the reference numerals 5*c* and 5*e*, respectively. Finally, the wedge 12 of FIGS. 4, 7 and 8 has been replaced by wedges 12*a*, 12*d*, 12*e* and 12*g* in FIGS. 10, 13 to 15 and 20, respectively.

A further advantage of the arrangement according to the present invention results from the fact that the bridge member 16*a* in FIGS. 9 and 10 and the bridge members 16*d*, 16*e*, 16*ee*, 16*f*, 16*g*, 16*r* and 121 of FIGS. 13, 14, 16 to 20, 26 and 30, respectively, does, for all practical purposes, not have to protrude beyond the lower chords 4 and 4' of the outer girder 1. After the wedge 12 has been loosened, the bridge member 16*a* can be lifted free of the lower chord 4 and while at the same time being moved with respect to the cord 4' in such a way that it can be folded downwardly. In this way the outer girder 1 is completely opened downwardly, and the inner girder 2 is folded further with regard to the outer girder 1 and is withdrawn downwardly from the outer girder in a very simple manner.

Depending on the span to be obtained, for purposes of effecting further form work, the inner girder 2 is pulled outwardly to a predetermined extent and the wedge 12 may then be moved on the rails 11 up to and in engagement with the bridge member 16 and locked in this position. When the girder is to be transported, it may be locked with the girder members completlely telescoped one into the other.

With the embodiment shown in FIG. 9, the lower chords of the outer girder 1*a* are formed by trough profiles 24 which are open toward the top and which protrude inwardly. The bridge member 16*a* is in this instance shaped like a pan and provided with flanges as shown in FIG. 10 but has no bores whatsoever. It is provided with a wedge-shaped groove 26' having undercut rims and rests upon the wedge 12*a* but is non-detachable therefrom in view of the pin 25. The wedge 12*a* is shaped in conformity with the groove 26 of the bridge member 16*a*. The bridge member 16*a*, with the wedge 12*a* carried thereby, thus is movable along the rail 11 on the inner girder 2*a*. For purposes of interlocking the elements of the girder, the wedge 12*a* is moved to a desired place within the outer girder 1*a*, the outer downturned tips of the bridge member 16*a* engaging the troughs 24. Thereupon, the wedge 12*a* is forced inwardly first by hand and then by hammer blows whereby the bridge member 16*a* is pressed downwardly into the troughs 24 while the inner girder 2*a* is pressed upwardly against the outer girder 1*a*. The inertia of the bridge member and its frictional engagement with the girder 1*a* will cause the hammer blows to drive the wedge 12*a* into wedging position. Also, the bridge member can be held in place by hand or by clamping means during hammering. The selective determination of the locking position yields particular static advantages.

With the embodiment according to FIG. 11 and FIG. 12, the outer girder is a solid girder having the ends of its arms bent in a groove-like manner toward the inside. The inner girder 28 is in a manner known per se formed with a triangular cross-section, the lower edge of which constitutes a rail 11*b* which has a section 29 forming an angle with the remainder of the lower edge of the inner girder 28. Wedge and bridge member are in this embodiment combined into a single structural member 30 which is displaced along the rail 11*b* until it moves upon the angular section 29. During this operation, the downwardly flanged marginal portions of the bridge-like extensions of the member 30 engage the grooves of the outer girder 27 and bring about an interlocking with the inner girder in the manner described above. When this embodiment, the torque imposed by a given load will be the less, the shorter the total length of the span, whereas with the embodiment according to FIG. 9, the torque can be selected at random when short spans are involved. As will be noted from FIGS. 11 and 12, the inner girder is provided with a rail 11*a*, 11*b* as an integral part thereof.

According to a further embodiment of the invention illustrated in FIGS. 13 and 14, wedge-shaped ends of the bridge member 12*d* engage the correspondingly shaped wedge-shaped grooves or troughs in the lower chords of the outer girder 1*d* so that the bridge-wedge combination is displaceable at least over a portion of the length of the outer girder. In contrast to the embodiments described above, with the arrangement of FIGS. 13 and 14, the bridge-wedge combination is not non-detachably connected to the outer girder. The wedge 12*d* is arranged displaceably but non-detachably on the bridge member 16*d*, as is clearly evident from FIGS. 13 and 14.

The problem underlying the present invention may also be solved in a different way while resorting to the principle of the invention as set forth above. More specifically, with reference to FIGS. 15 and 16, the outer girder 13 may take the form of a sheet metal box open at the bottom. The legs 1*e* of outer girder 13, however, are not bent inwardly at their bottom edges but terminate in rods L round in cross section extending along the entire length of the outer girder 13. These round rods thus constitute rails similar to the rails 11 of FIGS. 5 and 6. With this embodiment the inner girder 2*e* has no guiding rail but has its lower edge provided merely with a surface along which the wedge 12*e* is positioned and by means of which the inner girder rests upon the wedge.

In order to assure the combined bridge-wedge member will be able to be non-detachably but slidably located at various positions over the length of the outer girder, the lower end of the legs are, in conformity with the present invention provided with a series of longitudinal slots 101 so that in closed condition, the bridge ends can unimpededly rest on the lower chords L and 4'*e*.

One end of the bridge member 16*e* is provided with an elongate slot within which is embraced one rail L of the outer girder 13 in a manner somewhat similar to that in which wedge 12 of FIG. 8 by means of its member 13 embraces the rails 11, however, with lateral play.

For purposes of displacing the bridge-wedge member, it is desirable that the slot in the longitudinal eye of the bridge member 16*e* will be able to embrace rail L with play on the left and right sides thereof, so as to be able to fold bridge member 16*e* downwardly.

It may be added that the longitudinal slots or openings 101 are cut into the respective leg of the outer girder 13 at certain intervals directly above the rail L. These openings 101 are of such dimensions that one jaw 116 of the slot in bridge member 16*e* can move laterally through the opening 101 when the bridge member 16*e* is laterally displaced and lowered. The other end 117 of the bridge member may, for instance, in the form of a flange similar to that of FIG. 10 engage a corresponding slot 118 at the lower end of the other leg 1*e* of the outer girder 13. The wedge is adapted to be knocked by

hammer blows into its fixed engagement when the bridge member together with said wedge has been moved into the desired position. The bridge member 16*e* may be displaced in folded-down condition as shown in FIG. 17.

The slot opening (enabling the displacement of the bridge member in an outer girder of box shape open at the bottom) does not necessarily have to be arranged at the extreme end of the longitudinal eye of the bridge member but, as illustrated in FIG. 18 may also be arranged in the upper curve of the longitudinal eye of the bridge member 16*ee*. In such an instance, following a lateral displacement of bridge member 16*ee*, it would be possible subsequently to displace the bridge member in the longitudinal direction of the outer girder without any material folding down movement of the bridge member.

It is also possible, in conformity with the present invention, that the ends of the bridge member extend around the lower chords 24*f* of the outer girder 1*f* from below as shown in FIG. 19. In this instance, the lower chords 24*f* have their grooves 24*ff* engaged by the ends of the bridge member 16*f* from above, as is also clearly shown in FIG. 19.

Also, as seen in FIG. 20, if desired, the wedge member 12*g* may be movably but non-detachably connected to the bridge member 16*g* which latter by means of dovetail portions 117 (one only being shown), is movable over the entire length of the lower chords of the outer girder. The lower chords of the outer girder 1*g* are, of course, provided with correspondingly dovetail-shaped grooves engaging with play the dovetail portions 117.

Whereas FIG. 11 shows the lower edge of the inner girder, at least over a portion of its length, designed in a wedge-shaped manner as at 11*a*, while FIGS. 21 and 22 show the outer girder 27*h* at least over a portion thereof designed in a wedge-shaped manner as at 24*a*, in order to allow the bridge-wedge member 16*c* to be knocked into a tight position, said bridge-wedge member 16*c* preferably is formed of a single piece. The bridge-wedge member has a groove-like upstanding portion 16*b* adapted for slidably engaging the lower edge of the inner girder.

In order to prevent accidental detachment of wedge 12 from the lower chords 11 of the inner girder 2, according to the present invention, and as shown in FIGS. 23 to 25, a latch 119 is provided which is moved into latching position by knocking the same in the direction toward the lower chord 11 thereby preventing the wedge with its guiding jaws from sliding beyond the end of the chord 11. If, for some reason, the wedge is to be removed, latch 119 is knocked in the direction toward the upper chord thereby allowing the removal of the wedge from the inner girder.

FIG. 26 shows a further modification of the invention inasmuch as according to this figure the bridge ends 121 of bridge 121' are so designed that they embrace with play the lower chords 124 of the outer girder 120. The reverse arrangement is shown in FIG. 27 according to which the lower chords 122 of the outer girder 120 embrace the bridge ends 123 with play from above.

FIG. 28 shows still another embodiment of the bridge which may also be employed for preventing the lower chords 4*n* of the outer girder from being pressed toward or pulled away from each other during the transport of the girder. As will be seen from FIG. 28, the bridge member has a tubular section 124 by means of which it is longitudinally displaceably suspended on the lower chord 4'*n*, whereas the other end of the bridge member has a trough-shaped end corresponding to the shape of the lower chord 4*n*, by means of which it engages a sleeve 125 and 126 surrounding the lower chord 4*n*, as is clearly shown in FIG. 29. The operation of the connection will also be evident from FIG. 29. This bridge member may be employed for support of the wedge if said bridge member has the shape of bridge member 16*r* shown in FIG. 30.

It is, of course, to be understood that the present invention is, by no means, limited to the particular constructions shown in the drawings but also comprises any modifications within the scope of the appended claims.

What I claim is:

1. A form support comprising: outer channel-shaped girder means of substantially U-shaped cross section with the legs of said U-shaped cross section and thereby the legs of said outer girder means extending downwardly so that said outer girder means are open at the bottom portion thereof, the lower ends of said legs being flanged and provided with a longitudinal groove extending in the longitudinal direction of said outer girder means, inner girder means telescopically displaceable in said outer girder means and removable therefrom through said open bottom portion of said outer girder means, and locking means for interlocking said outer and inner girder means in any desired relative longitudinal position thereof, said locking means including a first locking member in form of a wedge member arranged to act upon the lower end of said inner girder means, said locking means also including a second locking member in form of a bridge member for bridging the lower ends of the legs of said outer girder means, said bridge member having a surface portion for cooperation with said wedge member, said bridge member having a pan-shaped cross section and having its lateral edge portions flanged and slidably engaging said grooved flanged portions of said outer girder means from above.

2. A form support comprising: outer channel-shaped girder means of substantially U-shaped cross section with the legs of said U-shaped cross section and thereby the legs of said outer girder means extending downwardly so that said outer girder means are open at the bottom portion thereof, means connected to the lower ends of said legs and forming the lower chords of said outer girder means, inner girder means telescopically displaceable in said outer girder means and removable therefrom through said open bottom portion of said outer girder means, and locking means for interlocking said outer and inner girder means in any desired relative longitudinal position thereof, said locking means including a first locking member in form of a wedge member arranged to act upon the lower end of said inner girder means, said locking means also including a second locking member in form of a bridge member for bridging the lower ends of the legs of said outer girder means, said bridge member having a pan-shaped cross section and having its lateral edge portions trough-shaped and partially extending around said lower chords from below for slidable engagement therewith.

3. A form support comprising: outer channel-shaped girder means of substantially U-shaped cross section with the legs of said U-shaped cross section and thereby the legs of said outer girder means extending downwardly so that said outer girder means are open at the bottom portion thereof, means connected to the lower ends of said legs and forming the lower chords of said outer girder means, inner girder means telescopically displaceable in said outer girder means and removable therefrom through said open bottom portion of said outer girder means, and locking means for interlocking said outer and inner girder means in any desired relative longitudinal position thereof, said locking means including a first locking member in form of a wedge member arranged to act upon the lower end of said inner girder means, said locking means also including a second locking member in form of a bridge member for bridging the lower ends of the legs of said outer girder means, said bridge member having a pan-shaped cross section and having its lateral edges slidably engaged from above by said lower chords.

4. A form support comprising: outer channel-shaped girder means of substantially U-shaped cross section with the legs of said U-shaped cross section and thereby the legs of said outer girder means extending downwardly so that said outer girder means are open at the bottom portion thereof, inner girder means telescopically displace-

able in said outer girder means and removable therefrom through said open bottom portion of said outer girder means, and locking means for interlocking said outer and inner girder means in any desired relative longitudinal position thereof, said locking means including a first locking member in form of a wedge member carried by said inner girder means, said locking means also including a second locking member in form of a bridge member bridging the lower ends of the legs of said outer girder means and having a surface portion for cooperation with said first locking member upon relative movement of said member longitudinal of said girder means, said bridge member being movable selectively into bridging position for preventing the removal of said inner girder means through the open bottom portion of said outer girder means or into an open position for allowing the removal of the inner girder means through the open bottom portion of said outer girder means, at least one of said locking members being non-detachably connected to one of said girder means, the outer ends of said form support being provided with studs for facilitating the lifting off of the form support from the masonry in connection with which it has been used.

5. A form support comprising: outer channel-shaped girder means of substantially U-shaped cross section with the legs of said U-shaped cross section and thereby the legs of said outer girder means extending downwardly so that said outer girder means are open at the bottom portion thereof, inner girder means telescopically displaceable in said outer girder means and removable therefrom through said open bottom portion of said outer girder means, said locking means for interlocking said outer and inner girder means in any desired relative longitudinal position thereof, said locking means including a first locking member in form of a wedge member carried by said inner girder means, said locking means also including a second locking member in form of a bridge member bridging the lower ends of the legs of said outer girder means and having a surface portion for cooperation with said first locking member upon relative movement of said member longitudinal of said girder means, said bridge member being movable selectively into bridging position for preventing the removal of said inner girder means through the open bottom portion of said outer girder means or into an open position for allowing the removal of the inner girder means through the open bottom portion of said outer girder means, at least one of said locking members being non-detachably connected to one of said girder means, and abutment means mounted at the outer end of said inner girder means for abutment with said wedge member for preventing the latter from accidentally leaving said inner girder means.

6. A form support comprising: outer channel-shaped girder means of substantially U-shaped cross section with legs of said U-shaped cross section and thereby the legs of said outer girder means extending downwardly so that said outer girder means are open at the bottom portion thereof, inner girder means telescopically displaceable in said outer girder means and removable therefrom through said open bottom portion of said outer girder means, and locking means for interlocking said outer and inner girder means in any desired relative longitudinal position thereof, said locking means including a first locking member in form of a wedge member carried by said inner girder means, said locking means also including a second locking member in form of a bridge member bridging the lower ends of the legs of said outer girder means and having a surface portion for cooperation with said first locking member upon relative movement of said member longitudinal of said girder means, said bridge member being movable selectively into bridging position for preventing the removal of said inner girder means through the open bottom portion of said outer girder means or into an open position for allowing the removal of the inner girder means through the open bottom portion of said outer girder means, at least one of said locking members being non-detachably connected to one of said girder means, said wedge member and said bridge member forming an entity.

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