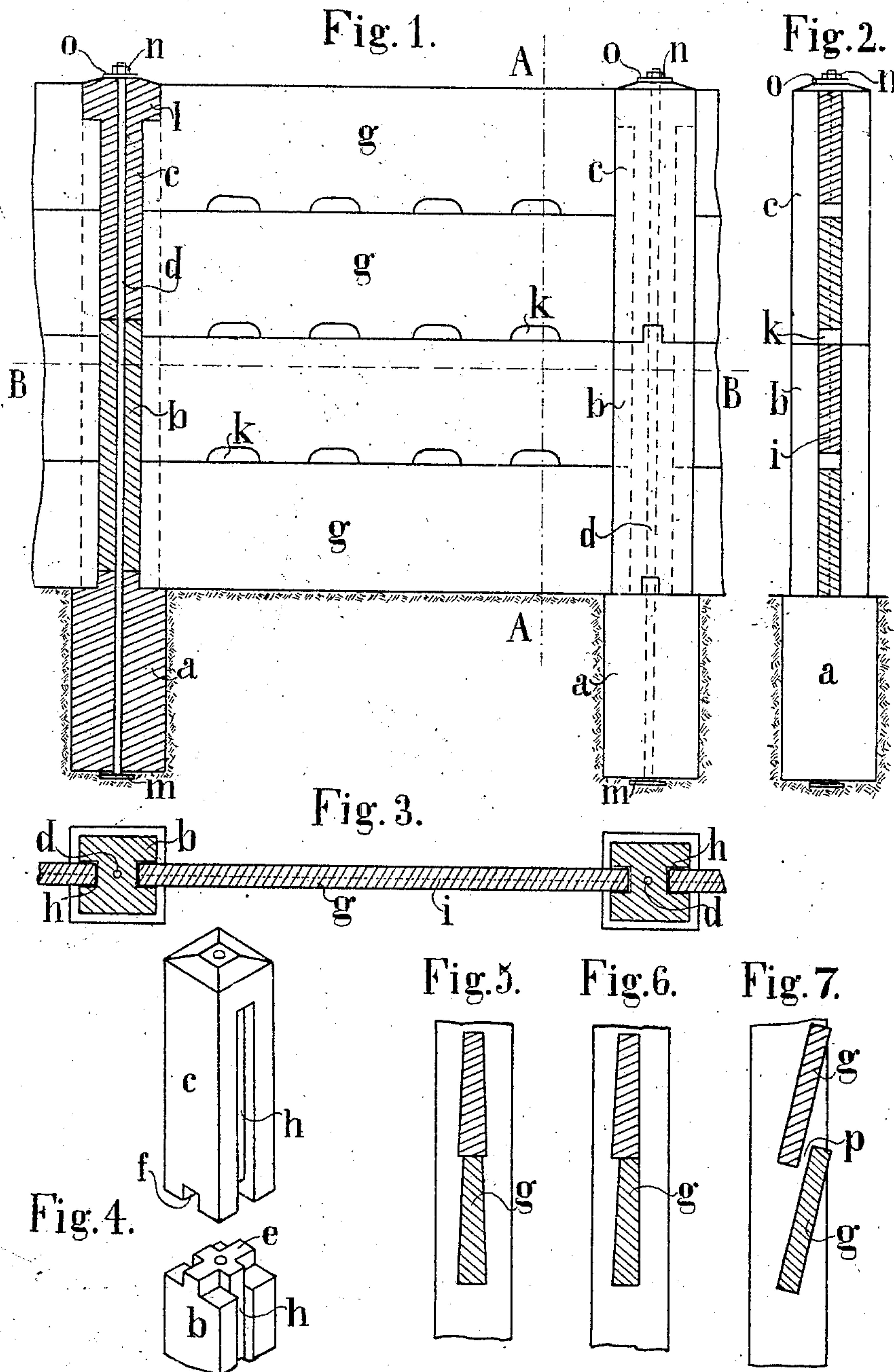


No. 829,397.

PATENTED AUG. 28, 1906.

C. L. F. GERBER.  
FENCE OF CONCRETE OR THE LIKE.

APPLICATION FILED JUNE 16, 1905.



Attest  
F. R. Fittton  
*[Signature]*

Inventor  
Carl L. F. Gerber  
by *[Signature]*



# UNITED STATES PATENT OFFICE.

CARL LOUIS FRIEDRICH GERBER, OF RÖBEL, GERMANY.

## FENCE OF CONCRETE OR THE LIKE.

No. 829,397.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed June 16, 1905. Serial No. 265,615.

*To all whom it may concern:*

1 Be it known that I, CARL LOUIS FRIEDRICH GERBER, a subject of the German Emperor, residing at Röbel, in the Grand Duchy of Mecklenburg-Schwerin, Germany, have invented certain new and useful Improvements in Fences of Concrete or the Like, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The hitherto known fences of concrete or similar materials offer a considerably greater resistance to the influence of the weather than the known fences made of old railway-sleepers, deals, and the like; but they present the disadvantage that they cannot be as easily erected or transferred to other places as the latter.

20 My invention relates to improvements in fences of concrete or the like whereby besides the above-named advantage also that of the wooden fences is obtained; and the objects of my improvement are, first, to divide the fence into posts and plates which can be connected by means of grooves and tongues; second, to divide the posts and the plates each into several pieces, so as to increase or decrease the height of the fence at will, and, third, to combine the several pieces of each post by means of a holding-down bolt. I attain these objects by the construction illustrated in the accompanying drawings, in which—

35 Figure 1 is an elevation of a part of a divisible concrete fence. Fig. 2 is a vertical cross-section through the same on the line A A in Fig. 1. Fig. 3 is a horizontal section through the same on the line B B in Fig. 1. Fig. 4 is a perspective view of the detached upper and intermediate parts of a post, and Figs. 5 to 7 are vertical cross-sections through parts of three modifications of the fence.

Similar letters of reference refer to similar parts throughout the several views.

45 The fence made of concrete or the like is according to my invention divided into a plurality of posts and a plurality of plates. In case the height of the fence is not great the posts and the plates between them may be each made in a single block, provided that the weights of the several parts are sufficiently small to render their transport and erection easy. In general, however, the height of the fence is so great that it is preferable to divide

each plate and each post into several superposed pieces *g g* and *a b c*, respectively, as is shown in Figs. 1 and 2. All these various pieces are preferably manufactured so that the pieces of each kind are alike and may be interchanged. Thereby also the advantage is obtained that fences of varying heights may be formed from the same pieces.

60 In order to strengthen the plate-pieces *g g*, they are preferably each provided with a stiffening inclosure—for example, a wire fabric *i* (see Fig. 3)—which is embedded in the concrete or the like. The several plate-pieces *g g* may be provided with cuts *k k*, in which one's hands may engage for lifting or inserting the pieces. The lowermost plate-pieces *g*, however, may be left without any cuts *k k*, as shown, if this be deemed desirable for different purposes, as to prevent animals from creeping through. The vertical end edges of the plate-pieces *g g* are made to engage like tongues in suitable grooves *h h* of the posts.

75 Each post consists of a ground-block *a*, a head-piece *c*, and, if so desired, one or several intermediate pieces *b*. The ground-block *a* may be made a little stronger than the other pieces and is arranged to be put in the ground. On the top face it is provided with a cross-shaped projection similar to *e* in Fig. 4, which is adapted to engage in a corresponding cross-shaped recess *f* of either the head-piece *c* or an intermediate piece *b*. Each intermediate piece *b* is provided on the top face with the cross-shaped projection *e*, on the bottom face with a similarly-shaped recess *f*, and on two opposite sides with two vertical grooves *h h*, extending over the whole length. The head-piece *c* is provided on the bottom face with a cross-shaped recess *f* and on two opposite sides with two vertical grooves *h*, which do not reach the top face, but terminate at a certain distance therefrom. In accordance with this each uppermost plate-piece *g* is cut out in the upper corners at *l*, so as to properly engage in the respective grooves *h h* of the head-pieces *c c*. All the parts *a b c* of each post are provided with central bores through which a holding-down bolt *d* can pass. The top faces of the head-pieces *c c* are shown as slightly sloped; but they may have any other shape. The height of each head-piece *c* and intermediate piece *b* is assumed to be double that of either plate-piece *g*. The heads *m m* of the holding-down bolts



*d d* are shown as very shallow and large in diameter; but they may have the ordinary shape and be provided with washers.

The divisible fence is erected as follows:

5 The several ground-blocks *a a* are put in the ground at the proper distances from each other after the holding-down bolts *d d* have been passed through them from below. If a fence as shown at Figs. 1 and 2 is desired,  
10 then a single intermediate piece *b* is put over each holding-down bolt *d* and placed on the ground-block *a*. Then two horizontal rows of plate-pieces *g g* are inserted one after the other in the grooves *h h* of the several inter-  
15 mediate pieces *b b*. Next two superposed rows of plate-pieces *g g* are placed on the top faces of the upper plate-pieces *g g* already inserted and afterward a head-piece *c* is so put over each holding-down bolt *d* that the  
20 edges of the upper plate-pieces *g g* engage in its grooves *h h*. At last the holding-down bolts *d d* are tightened with the aid of their nuts *n n* and washers *o o*, whereby the several parts of the fence are rigidly connected  
25 together. The pieces *b c* of either post are prevented from turning by the cross-shaped projections *e* of the ground-block *a* and the intermediate piece *b*, which engage in the corresponding recesses *f* of the pieces above them, respectively. The uppermost plate-  
30 pieces *g g* cannot be withdrawn or removed by unauthorized persons, as their tongues are checked by the head-pieces *c* engaging in their cuts *l*. In case the fence is to be formed of sections at right angles to each other of course the several pieces of the corner-posts will require to have their two  
35 grooves *h h* not on opposite sides, but on two adjoining sides.

40 It is evident that in case the fence requires to be half as high as shown only two superposed rows of plate-pieces *g g* need be put on, while the intermediate pieces *b b* are omitted and the head-pieces *c c* are placed direct on  
45 the ground-blocks *a a*. If the fence is desired to be higher, say two superposed intermediate pieces *b b* may be taken for each post and six superposed rows in all of plate-pieces *g g* may be employed. Obviously the fence  
50 can be easily taken to pieces, removed to another place, and there erected.

The divisible fence may be varied in many respects without deviating from the spirit of my invention. The posts shown have a  
55 square cross-section, (with the exception of the grooves *h h*,) but they may have any other cross-section. Instead of the cross-shaped projections *e e* also pins or pegs may be employed, which are arranged to engage in corresponding holes in place of the cross-shaped  
60 recesses *f f*, or the cross-shaped projections *e e* may be replaced by dovetailed projections, which engage in grooves of a dovetailed cross-section instead of in the cross-shaped  
65 recesses *f f*. Then the several pieces of each

post may be composed by laterally inserting the dovetailed projection of one piece in the dovetailed groove of the other piece. In this case the several pieces of each post are prevented from displacing themselves by the  
70 plate-pieces *g g*, which are so arranged as to engage partly in the groove of one piece and partly in the groove of the other piece. The cross-section of the plate-pieces *g g* may be varied. Figs. 5 and 6 show, for example,  
75 plate-pieces *g g* of an upwardly-tapering cross-section. Such plate-pieces may be provided at the vertical end edges with tongues, which can engage in grooves *h* of a uniform cross-section. The arrangement of the plate-  
80 pieces *g g* may also be modified. Fig. 7 shows, for example, slanting plate-pieces *g g*, which overlap each other and leave between them spaces *p*, which may serve for the circulation of air or for other purposes.  
85

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A divisible fence of concrete or the like, comprising posts formed in superimposed sections having registering grooves in the  
90 side walls thereof, one of said sections being designed to be buried, means for retaining the sections together, anchored by the buried section, and a plurality of plates designed to be superimposed and having their ends fitted  
95 and held within the grooves in the sections.

2. In a divisible fence of concrete and the like, the combination with a plurality of ground-blocks each provided with a vertical central bore and a projection on the top face,  
100 of a plurality of posts each provided with a vertical central bore, two lateral grooves and a recess in the bottom face, in which the projection of the respective ground-block can engage, a plurality of plates adapted to en-  
105 gage in the grooves of said plurality of posts, and a plurality of holding-down bolts passed through the vertical central bores of said plurality of ground-blocks and said plurality of posts and adapted to connect together the  
110 fence.

3. In a divisible fence of concrete and the like, the combination with a plurality of ground-blocks each provided with a vertical central bore and a projection on the top face,  
115 of a plurality of intermediate pieces each provided with a vertical central bore, two lateral grooves, a recess in the bottom face and a projection on the top face, a plurality of head-pieces each provided with a vertical central  
120 bore, two lateral grooves and a recess in its bottom face, a plurality of holding-down bolts passed through the vertical central bores of said plurality of ground-blocks, said plurality of intermediate pieces and said plu-  
125 rality of head-pieces and adapted to connect together the pieces, whereby a plurality of posts is formed, and a plurality of plate-pieces adapted to engage in the grooves of said plurality of posts and to form walls.  
130



4. In a divisible fence of concrete and the like, the combination with a plurality of ground-blocks each provided with a vertical central bore and a cross-shaped projection  
5 on the top face, of a plurality of posts each provided with a vertical central bore, two lateral grooves and a cross-shaped recess in its bottom face, a plurality of plates adapted to engage in the grooves of said plurality of  
10 posts, and a plurality of holding-down bolts passed through the vertical central bores of said plurality of ground-blocks and said plurality of posts and adapted to connect together the fence.

15 5. In a divisible fence of concrete and the like, the combination with a plurality of ground-blocks each provided with a vertical central bore and a cross-shaped projection on the top face, of a plurality of intermediate  
20 pieces each provided with a vertical central bore, two lateral grooves extending over the whole height, a cross-shaped recess in the

bottom face and a cross-shaped projection on the top face, a plurality of head-pieces each provided with a vertical central bore, 25 two lateral grooves extending to a point beneath its top face and a cross-shaped recess in its bottom face, a plurality of holding-down bolts passed through the vertical central bores of said plurality of ground-blocks, 30 said plurality of intermediate pieces and said plurality of head-pieces and adapted to connect together the pieces, whereby a plurality of posts is formed, and a plurality of superposed plate-pieces adapted to engage in the 35 grooves of said plurality of posts and to form walls.

In testimony whereof I have affixed my signature in presence of two witnesses.

CARL LOUIS FRIEDRICH GERBER

Witnesses:

RICHARD SCHLÜNZ,

AUGUST PÜHELMANN.