

W. E. BROCK.
TURNBUCKLE OR COUPLING.
APPLICATION FILED JUNE 24, 1908.

946,594.

Patented Jan. 18, 1910.

Fig. 1.

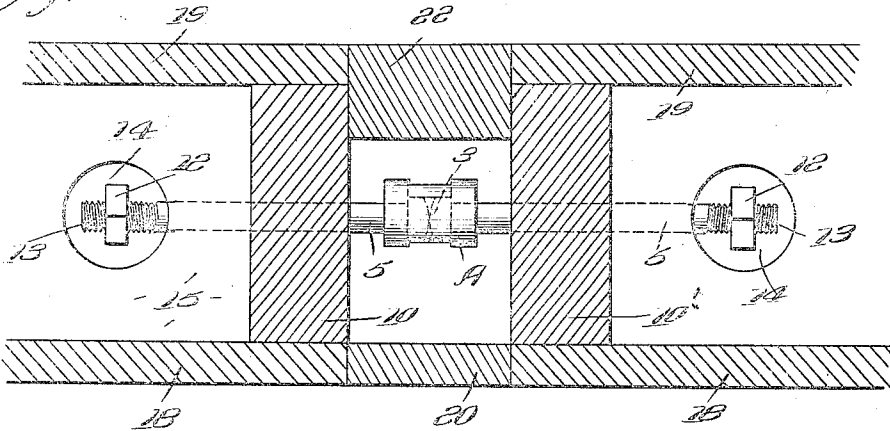


Fig. 2.

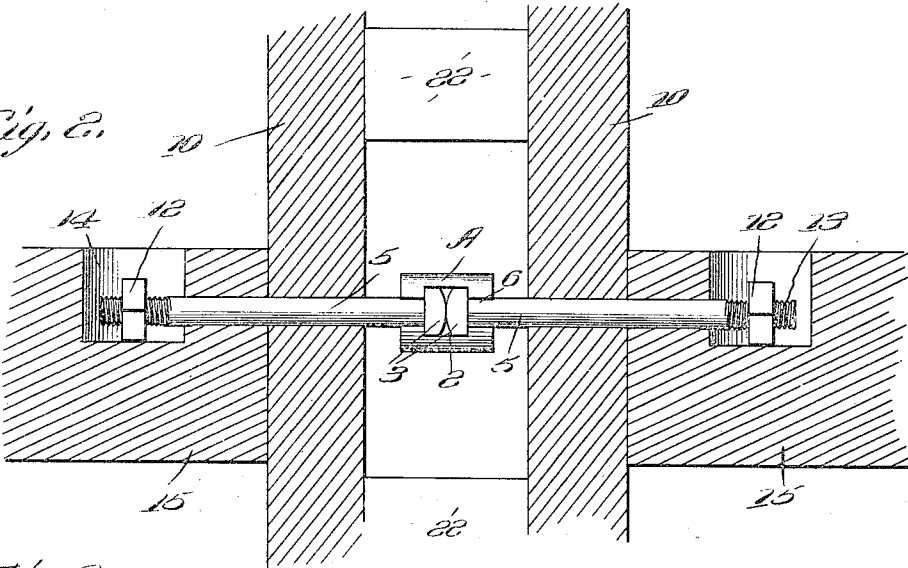


Fig. 3.

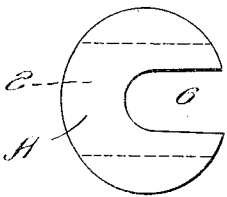
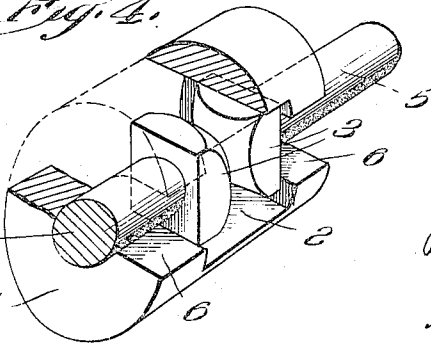


Fig. 4.



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WILLIAM E. BROCK, OF NORTH PLAINFIELD, NEW JERSEY.

TURNBUCKLE OR COUPLING.

946,594.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed June 24, 1908. Serial No. 440,160.

To all whom it may concern:

Be it known that I, WILLIAM E. BROCK, a citizen of the United States, residing at 15 Mountain avenue, North Plainfield, in the county of Somerset and State of New Jersey, have invented new and useful Improvements in Turnbuckles or Couplers, of which the following is a specification.

My invention relates to improvements in couplings, or turnbuckles, particularly adapted for use in the construction of portable buildings of the character for which I have obtained Letters Patent of the United States No. 638,494, dated Dec. 5, 1899. In such prior constructions the abutting sections of the buildings are provided with bolts the heads of which are coupled together by means of slotted, or U shaped, pieces adapted to be slipped over the heads of the bolts after the sections are set in place.

I have found in practice that difficulty is experienced in always getting the adjacent sections in line, because the bolts in the abutting sections of the construction shown in said patent are out of alinement. There is also the difficulty in using the couplings employed in my former constructions that, because, owing to the eccentric location of the bolts, each of the bolts joined by a coupling has to be turned separately; the labor is further increased by the fact that the wrench employed upon the heads of the bolts can be moved through only a comparatively small angle.

A desirable form of my improved turnbuckle is illustrated in the accompanying drawing in which the reference characters of the description indicate the corresponding parts in the different figures.

Figure 1 is a horizontal section of a portion of two adjoining building-sections showing a desirable employment of my invention. Fig. 2 represents a vertical section of corresponding parts of the building. Fig. 3 shows an end view of my invention and Fig. 4 is a perspective view of my coupling with portions broken away.

In my improved form of coupling the bolts of the adjacent sections are provided respectively with right and left hand threads and are arranged in alinement, whereby the sections forming the building may be all provided with holes for receiving the bolts in the same relative positions and the various sections assembled at random, while, by the application of a suitable wrench to the body

of the coupling the coupling may be rotated through a wide angle with a single movement and with a considerable reduction in the time and labor required for the erection of the building. To this end I form my coupling A as shown in the drawings with a central recess 2 adapted to receive the heads 3 of the bolts 5, which are arranged in alinement with their heads adjacent and their shanks outwardly extending through slots 6 in the ends of the coupling. As best shown in Fig. 4, this central recess 2 is merely of sufficient size to admit the heads arranged square and parallel, whereby they are prevented from turning within the coupling.

In the application of my coupling to a portable building construction as shown in Figs. 1 and 2, the bolts 5 are arranged one in either section in such alinement, with their heads projecting sufficiently from the faces of the vertical joists 10 to admit the application of the coupler 1. Nuts 12 are carried on the ends of the bolts which are reversely screw threaded at 13, the said nuts being arranged in sockets 14 in the horizontal beams 15. Other parts of the building sections shown are inside and outside finishing boards 18 and 19; vertical filling-strips 20 to close the space between the sections when they are in place; and 22-22 are blocks arranged between the sections above and below the turnbuckle to take the strain of the clamping.

It is obvious that my improved coupling may be employed for various purposes other than in the construction of portable buildings and for many situations where the ordinary right and left hand turnbuckle cannot be employed owing to the limitations of space available.

Having fully described my invention, what I claim is,—

1. A coupler for a turnbuckle having opposite forked ends adapted to be inserted over the shanks of bolts and to receive between them the bolt-heads arranged adjacent, and having integral connecting pieces connecting the ends, said connecting pieces being spaced to receive between them the bolt-heads to be held in parallel relation thereby.

2. In a turnbuckle the combination with reversely screw-threaded bolts having their heads set adjacent and having nuts on the screw threaded bolt ends, of a detachable coupler adapted to be inserted over the bolt

heads to prevent their turning therein, said coupler adapted to the application of a suitable wrench.

3. In a turnbuckle the combination of
5 reversely screw-threaded bolts having their heads set adjacent, of a detachable coupler adapted to be inserted over the bolt heads, said coupler being provided with opposite forked ends fitting over the bolt shanks and
10 formed with integral side connecting pieces, said connecting pieces spaced to receive between them the bolt heads to be held in parallel relation thereby.

4. In a turnbuckle the combination of
15 reversely screw threaded bolts arranged in alinement and having their heads set adjacent, of a coupler having a central recess for the insertion of the bolt heads, said recess being formed to retain the bolt-heads
20 in parallel relation, and slots in the coupler end for the bolt shanks.

5. In a turnbuckle the combination of reversely screw-threaded bolts having their heads set adjacent, of a cylindrical coupling-piece adapted to be inserted over the bolt
25 heads said coupling-piece being provided with opposite forked ends fitting over the bolt shanks and formed with opposite integral side connecting pieces between said
30 forked ends, said connecting pieces being spaced to receive between them the bolt heads to be held in parallel relation thereby and to permit the application of a suitable wrench to the coupling-piece.

In testimony whereof I have signed my
35 name to this specification in the presence of two subscribing witnesses.

WILLIAM E. BROCK.

Witnesses:

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T. Q. HILL.