April 3, 1934. E. J. SCOTT ET AL 1,953,691

QUOIN

Original Filed Oct. 24, 1931

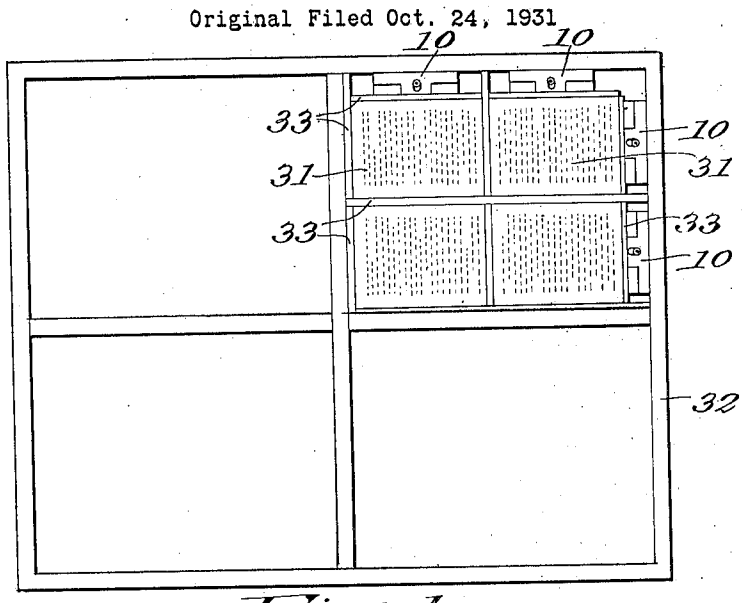


Fig. 1

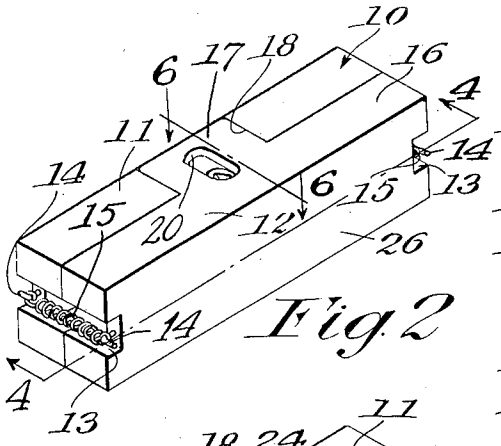


Fig. 2

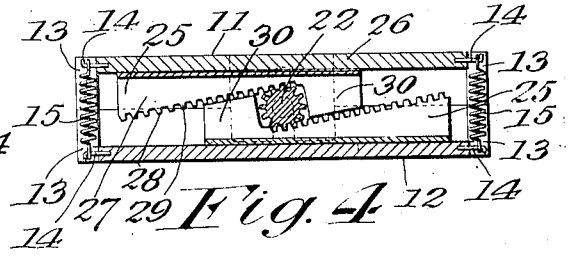


Fig. 4

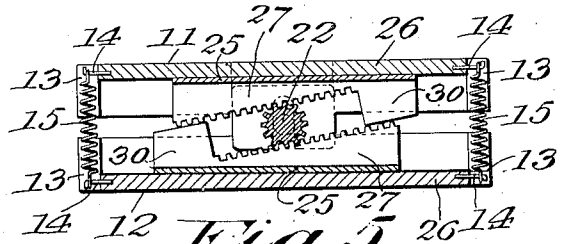


Fig. 5

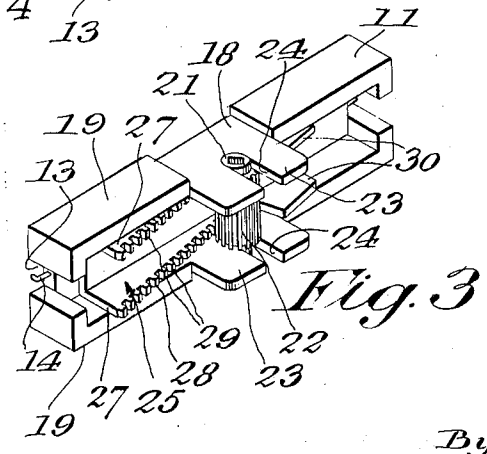


Fig. 3

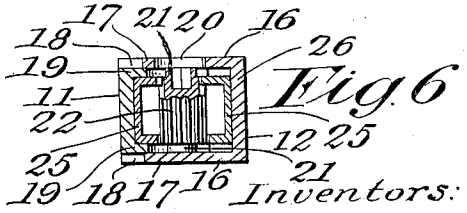


Fig. 6

Inventors:
Ephriam J. Scott
Wallace M. Cutler

By Macleod, Calver, Copeland & Dike
Attorneys

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QUOIN

Ephriam J. Scott, Somerville, and Wallace M. Cutler, Gloucester, Mass., assignors, by mesne assignments, of eighty per cent to Jesse G. Zim and Martin J. Caulfield and twenty per cent to Thomas A. McDonough, all of Medford, Mass.

Application October 24, 1931, Serial No. 570,864
Renewed September 8, 1933

2 Claims. (Cl. 254—42)

This invention relates to quoins of the general character described in the co-pending application of Jesse G. Zim, Serial No. 523,024, filed March 16, 1931.

It is the object of the present invention to provide another practical construction of quoin embodying the general principles embodied in the quoin construction described in the above mentioned co-pending application.

Before explaining in detail the present invention, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawing, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation, and it is not intended to limit the invention beyond the terms of the several claims hereto appended as considered in view of the prior art and the requirements thereof.

The invention will be more clearly understood from the following description in conjunction with the accompanying drawing in which:

Fig. 1 is a plan view of a chase showing a type locked therein by quoins embodying the invention.

Fig. 2 is a perspective view of a quoin embodying the invention.

Fig. 3 is a perspective view of a portion of the quoin.

Figs. 4 and 5 are sectional views taken upon the line 4—4 of Fig. 2 showing the parts of the quoin in different positions, and

Fig. 6 is a sectional view of the quoin taken upon the line 6—6 of Fig. 2.

The quoin illustrated in the accompanying drawing comprises a hollow casing 10 made up of two cooperating open box-like parts 11 and 12. A portion of the ends of the parts 11 and 12 are cut away as indicated at 13 and pins 14 are secured in the cut away end portions. The pins 14 at each end are adapted to be connected by a spring 15. Each of the longitudinal side walls 16 of the part 12 is provided with a projection 17 intermediate its ends adapted to be received in a depression 18 formed intermediate the ends of each of the longitudinal side walls 19 of the part 11. One of the projections 17 is provided with an elongated slot 20. Each of the side walls 19 of the part 11 are also provided with a projection 23 having a slot 24 serving as a guide for the shaft 21 carrying a pinion 22.

A pair of cooperating wedge members 25 are positioned within the casing 10 and one is adapted to slidably engage the interior surface of the outer wall 26 of each of the parts 11 and 12 of the casing. Each of the wedge members 25, preferably, is constructed in the form of a channel stamping, the web of which is arranged to engage the interior surface of one of the walls 26. A portion 29 of the edge of each of the legs 27 of the channel is inclined and provided with rack teeth 28 adapted to engage the pinion 22. Another portion of each of the legs 27 of the channel is provided with a projection 30, the outer edge of which is inclined and adapted to engage the inclined portion 29 of one of the legs of the other channel.

The type 31 is positioned in a suitable manner between the frame members of a chase 32. The spaces between the edges of the type and frame of the casing are built up by blocks of wood 33 or the like. The quoin is then positioned in the spaces between the blocks 33 and the frame and the shaft 21 is rotated to rotate the pinion 22 by inserting a tool through the slot 20 to engage a socket in the end of the shaft 21 to cause the members 25 to move longitudinally in opposite directions, thereby varying the distances between the corresponding outer parallel walls 26 of the parts 11 and 12 of the casing. The longitudinally space projections 30 bearing at all times upon the inclined edge portions 29 effectively prevent tilting of the quoin. The pinion effectively locks the wedge members 25 in their adjusted position.

We claim:

1. A quoin comprising a casing having two separate parts of channel cross section movable laterally in one direction, the side walls of one of the casing parts each having an intermediate recessed portion, the side walls of the other of the casing parts each having an intermediate projection adapted to engage said recessed portions whereby lateral displacement of the casing portions in the other two directions is prevented, a pair of bars housed within said casing having corresponding outer parallel surfaces and inner inclined surfaces having teeth, each of said bars having a projection extending toward the other bar and adapted to engage the inclined surface thereof, at least one of said recessed portions and one of said projections having an opening, and a pinion adapted to engage said teeth and having an opening of polygonal shape adapted to be engaged by a key inserted through the openings in said projection and recessed portion, the opening in said recessed portion serving as a bearing

preventing lateral movement of the axis of the pinion longitudinally of the quoin.

2. A quoin comprising a casing having two parts movable laterally in one direction, means for preventing displacement of the casing parts laterally in the other two directions, a pair of bars housed within said casing having corresponding outer parallel surfaces and inner inclined surfaces having teeth, each of said bars having a projection extending toward the other bar and adapted to engage the inclined surface thereof, the adjacent side walls on one side of the casing being provided with alined openings, and a pinion adapted to engage said teeth and having an opening of polygonal shape adapted to be engaged by a key inserted through said openings in the casing, one of said openings serving as a bearing preventing lateral movement of the axis of the pinion longitudinally of the quoin.

EPHRIAM J. SCOTT.
WALLACE M. CUTLER.