

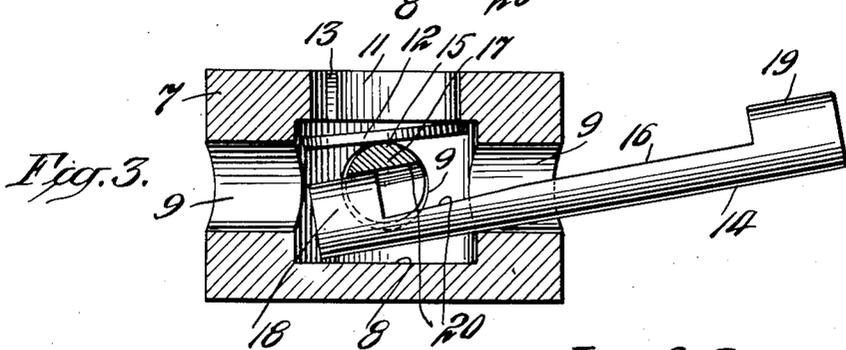
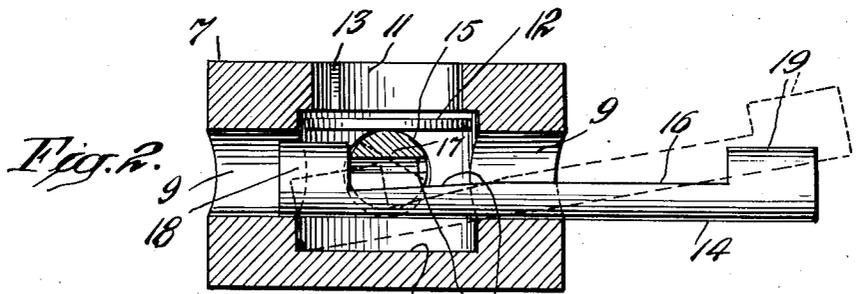
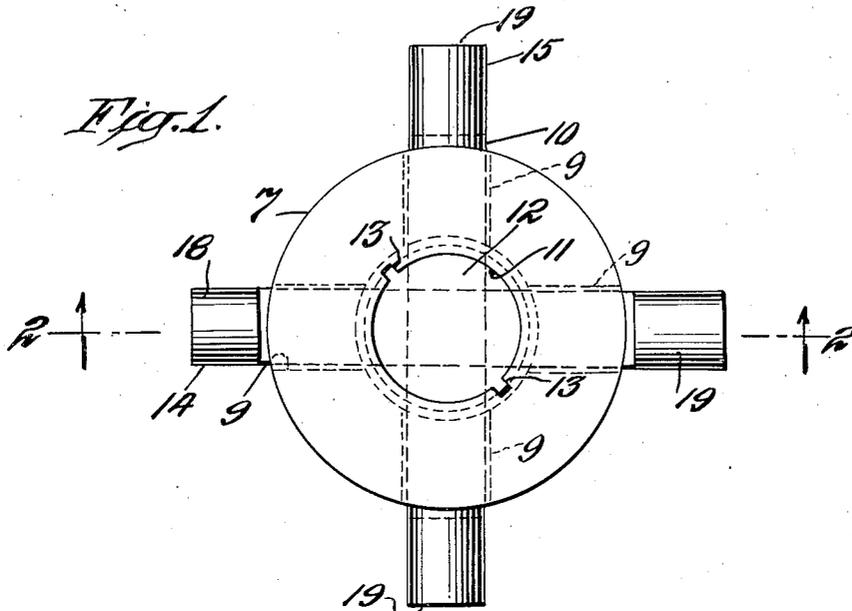
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MORTISED BLOCK PUZZLE

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MORTISED BLOCK PUZZLE

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3 Claims. (Cl. 273-160)

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The invention herein disclosed relates to puzzles, particularly those of the take-apart type.

Objects of the invention are to provide a puzzle of an interesting, entertaining nature which while sufficiently difficult will be capable of solution by thoughtful perserverance, which will be of novel, unusual and attractive appearance and which with all such advantages may be produced at relatively low cost.

A further special object is to incorporate in the puzzle a reward or incentive for accomplishing the solution.

Other special objects and the novel features by which the purposes of the invention are attained are set forth or will appear in the course of the following specification.

The drawing accompanying and forming part of the specification illustrates one of the present commercial embodiments of the invention. Structure, however, may be modified and changed as regards the immediate illustration, all within the true intent and proper scope of the invention as hereinafter defined and claimed.

Fig. 1 in the drawing is a face view of the puzzle;

Fig. 2 is a cross sectional view as on substantially the plane of line 2-2 of Fig. 1;

Fig. 3 is a similar view illustrating the parts in the unlocking or releasing position.

In the form of the invention illustrated there is provided a substantially cylindrical block or body 7 having a central cylindrical chamber 8 and substantially cylindrical passages 9 and 10 disposed with their axes crossing at a right angle at the center of said chamber.

An opening 11 is left in one end of the block to expose a coin or token 12 insertable when lined up with slots 13 in the edges of such opening.

Slidably engaged in the passages 9 and 10 are crossed pins or pegs 14, 15, having substantially cylindrical end portions snugly but slidably operable in the passages 9 and 10 and reduced, substantially semicylindrical intermediate portions 16, 17, slidably engageable over each other.

The intersecting passages being in the same common plane permits of the sliding crossed engagement of the intermediate half portions of the pegs and the full round end portions, while permitting the pegs to be slid in and out, one over the other, are of a length that will ordinarily lock the pins in their crossed relation, confined in the passages 9 and 10.

The secret of the puzzle is the cutting of one of the full round end portions, designated 18, slightly

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shorter than all the other full round portions 19, and the tapering and thinning down of the half circular portion 16 of that particular peg, 14, toward said shorter end 18, substantially as shown in Fig. 2.

These two features permit peg 14 to be withdrawn as in Fig. 2, to the point where the shorter end portion 18 will just clear the wall of the inner circular chamber 8 when finally up against the half circular portion 17 of peg 15. In this relation the thinned or tapered portion 20 of peg 14 will permit enough rotation of peg 15 in a clockwise direction, Fig. 2, to enable the shorter end portion 18 to drop down somewhat beneath the part 17 until the latter can be turned slightly in the opposite, counter-clockwise direction to engage over portion 18 and permit the latter to pass from beneath portion 17 out through the remainder of passage 9, all as will be clear from Fig. 3.

The parts may be assembled by reverse manipulation, the coin may be loose in the chamber, overlying the crossed pegs and providing additional difficulty in the separation of the pegs. When the pegs have been removed, however, the block may be tilted in different directions to line up the coin with the slots 13, whereupon it may be slipped out of the chamber.

In reassembling, the coin may ordinarily be replaced first before inserting the pegs.

The puzzle presents an attractive and intriguing appearance, inviting attention to the problem of effecting the release and removal of the normally interlocked pegs and the coin confined thereby.

While largely for the matter of low cost it may be preferred to make the puzzle, that is the block and the two pegs, of wood, it is contemplated that the same may be made of metal, plastics or other materials.

In the drawing Figs. 2 and 3, both pegs are shown as tapered, relieved or thinned down toward one end at 20, so that when these reduced portions are brought together in overlying relation they may be manipulated to enable the release of the shorter ended peg. While this may generally be desirable, it is possible that all the relief 20 may be put into one peg only, as first above described.

What is claimed is:

1. A puzzle comprising a block having a central chamber and substantially cylindrical passages intersecting said chamber in a common plane and crossing each other at right angles, pegs in crossed relation having substantially

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cylindrical end portions slidably operable in said crossed passages and substantially semicylindrical intermediate portions slidably engaged over each other, one of the substantially cylindrical end portions of one of said pegs being slightly shorter than the other end portions and the intermediate, substantially semicylindrical portion of that particular peg being tapered in thickness toward said shorter end portion.

2. A puzzle comprising a block having a central chamber and substantially cylindrical passages intersecting said chamber in a common plane and crossing each other at right angles, pegs in crossed relation having substantially cylindrical end portions slidably operable in said crossed passages and substantially semicylindrical intermediate portions slidably engaged over each other, one of the substantially cylindrical end portions of one of said pegs being slightly shorter than the other end portions and the intermediate, substantially semicylindrical portion of that particular peg being tapered in thickness toward said shorter end portion and a token confined by said pegs in their interlocked relation in said block, said block having an opening at one end of the chamber of a size to pass the token when the latter is tilted in the chamber and said token being normally supported on said crossed pegs in non-tilting relation and

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whereby it may be released from the chamber only after the pegs have been withdrawn from such supporting relation.

3. A puzzle comprising a block having a central chamber and substantially cylindrical passages intersecting said chamber in a common plane and crossing each other at right angles, pegs in crossed relation having substantially cylindrical end portions slidably operable in said crossed passages and substantially semicylindrical intermediate portions slidably engaged over each other, one of the substantially cylindrical end portions of one of said pegs being slightly shorter than the other end portions and the intermediate, substantially semicylindrical portion of that particular peg being tapered in thickness toward said shorter end portion and the overlying semicylindrical portion of the other peg also being reduced in thickness.

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