A. MURF & M. KROMPIGEL.

PUZZLE.

APPLICATION FILED MAY 6, 1908.

Patented Dec. 8, 1908.

906,450.

Fig. 1.

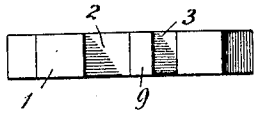


Fig. 2.

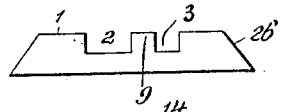


Fig. 3.

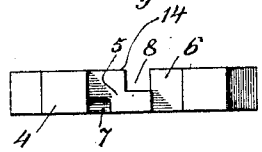


Fig. 4.

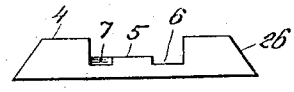


Fig. 5.

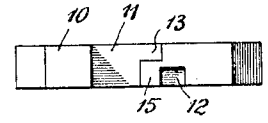


Fig. 6.

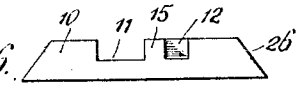


Fig. 7.

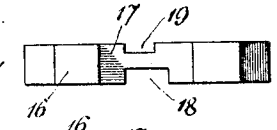


Fig. 8.

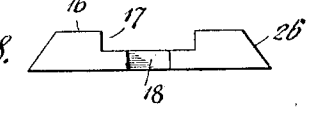


Fig. 9.

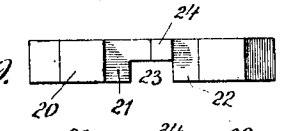


Fig. 10.

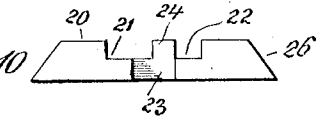
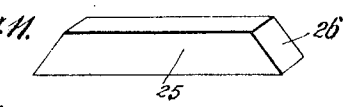


Fig. 11.



Witnesses

A. H. Rabsag,

K. K. Butler

Fig. 12.

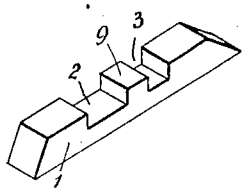


Fig. 13.

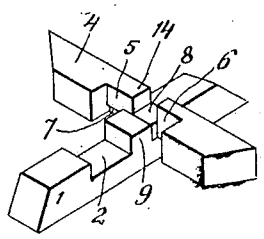


Fig. 14.

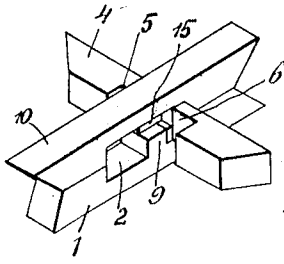


Fig. 15.

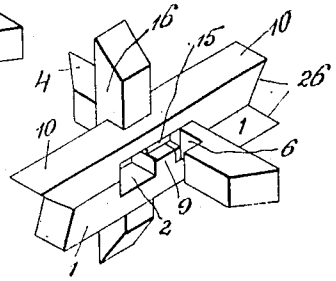


Fig. 16.

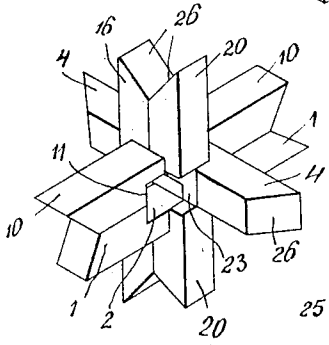
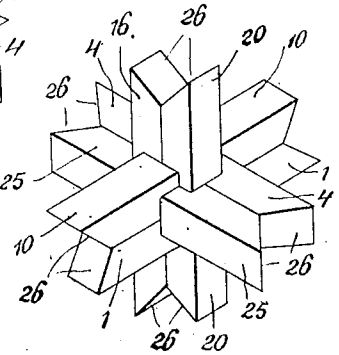


Fig. 17.



Inventors

A. Murf and

M. Krompigel

By H. C. Evarts & Co.

Attorneys

UNITED STATES PATENT OFFICE.

ANDY MURF AND MATHEWS KROMPIGEL, OF ETNA, PENNSYLVANIA.

PUZZLE.

No. 906,450. Specification of Letters Patent. Patented Dec. 8, 1908.

Application filed May 6, 1908. Serial No. 431,193.

To all whom it may concern:

Be it known that we, ANDY MURF and MATHEWS KROMPIGEL, subjects of the King of Hungary, residing at Etna, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Puzzles, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a puzzle, and the object of our invention is to provide a novel, perplexing and intricate puzzle or toy for testing the ingenuity, the puzzle requiring considerable skill and patience, at the same time affording considerable amusement to properly solve the puzzle.

The invention consists in the further novel construction and combination of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of our invention, in which,

Figure 1 is a horizontal plan of a foundation bar. Fig. 2 is an elevation of the same, Fig. 3 is a plan of the first transverse bar, Fig. 4 is an elevation of the same, Fig. 5 is a plan of the second horizontal bar, Fig. 6 is an elevation of the same, Fig. 7 is a plan of the first vertical bar, Fig. 8 is an elevation of the same, Fig. 9 is a plan of the second vertical bar, Fig. 10 is an elevation of the same, Fig. 11 is a perspective view of a locking bar, Fig. 12 is a perspective view of a horizontal foundation bar, Fig. 13 is a similar view of the same with the first transverse bar mounted thereon, Fig. 14 is a perspective view of the same with the second horizontal bar in position, Fig. 15 is a perspective view of the same with the first vertical bar in position, Fig. 16 is a similar view with the second vertical bar in position, and Fig. 17 is a perspective view of the bars of our puzzle assembled showing the locking bar as a key for holding the various bars together.

The reference numeral 1 designates a horizontal foundation bar having transverse grooves 2 and 3, said grooves being approximately half the depth of the bar 1 and the groove 2 approximately twice the width of the groove 3.

The reference numeral 4 designates a bar having a transverse groove 5 twice the width of the bar 1, said groove having a portion 6 thereof a greater depth than the remainder of the groove, with the exception of a recess 7. The transverse bar 4 upon one side thereof and centrally of the groove 5 is provided with a vertical groove 8, said groove 8 corresponding in width to the recess 7 and being approximately a third of the width of the groove 5.

With the bar 1 held in a horizontal position, the side of the bar 4 is placed downwardly in the groove 3 of the bar 1, whereby the vertical groove 8 of the bar 4 will aline longitudinally with the upper surface of the bar 1; the projection 9 of the bar 1 dividing the transverse groove 5 of the bar 4 for an object that will presently appear.

The reference numeral 10 designates the second horizontal bar, which is provided with a transverse groove 11 approximately half the depth of the bar, with a recess 12 upon one side and a cut away portion 13 upon the opposite side, said recess 12 of the cut away portion 13 corresponding in depth to the transverse groove 11. The bar 10 is now placed upon the horizontal foundation bar 1 in an inverted position with the transverse groove 11 of the bar 10 confronting the transverse groove 2 of the bar 1, while the recess 12 receives that portion of the bar 4 designated 14, and the projection 15 of the bar 10 resting upon the projection 9 of the bar 1.

The reference numeral 16 designates the first vertical bar, this bar being provided with a transverse groove 17 corresponding to approximately twice the width of the bar. One side of the bar 16 is provided with a vertical groove 18 and the opposite side with a vertical groove 19, the groove 18 being of a greater width than the groove 19. When this bar is placed in position, as shown in Fig. 15 of the drawings, the transverse groove 17 is adapted to receive the horizontal bars 1 and 10, while the vertical groove 19 receives the recessed portion of the first transverse bar 4. With the bar 16 in this position, the vertical groove 18 thereof provides clearance for the second transverse bar constituting the locking bar of the puzzle.

The reference numeral 20 designates a second vertical bar, this bar being formed with transverse grooves 21 and 22 and a vertical groove 23, said groove providing a projection 24. When this bar 20 is placed in position, the vertical groove 23 provides clearance for the locking bar, transverse grooves 21 and 22 clearance for the bars 1 and 10 and the projection 24 fitting in the

cut away portion 13 of a horizontal bar 10. Note that the vertical bars 16 and 20 snugly fit within the ends of the groove 5 of the transverse bar 4.

The assembled bars shown in Fig. 16 are now in position to receive the locking bar 25. This bar is adapted to rest in the vertical groove 23 of the bar 20, the transverse grooves 2 and 11 of the bars 1 and 10 and in the vertical groove 18 of the bar 16, locking various bars together to present a structure or solid body of a peculiar form, having six arms, each arm comprising the outer ends of two bars. By reference to Fig. 17 of the drawings, it will be observed that the structure conforms to a Chinese cross. To facilitate the matching and arranging of the various bars of our puzzle, the ends thereof are beveled, as at 26, and after the puzzle in an assembled form has been observed, a person will be cognizant of the fact that the beveled faces of the bars must confront one another when assembled.

It is apparent from the peculiar form of various bars of our puzzle that we have devised an exceedingly intricate puzzle requiring considerable thought to solve, particularly when the parts are disassembled and the object of the puzzle is to assemble said bars.

We would have it understood that the bars can be made of various kinds of material, and that the puzzle is susceptible to various changes, without departing from the spirit of the invention.

Having now described our invention what we claim as new, is;—

A puzzle comprising a foundation bar, a transverse bar, a horizontal bar, two vertical bars, and a locking bar, each of said bars being of the same length, of the same area in cross section and having beveled ends, the beveled ends of one bar being adapted to confront the beveled ends of an adjoining bar, said foundation bar provided with a pair of transverse grooves, each of said grooves being approximately half the depth of said foundation bar and one of said grooves being approximately twice the width of the other groove, said transverse bar having a transverse groove twice the width of the foundation bar and said groove having a portion thereof of greater depth than the remainder of the groove, said transverse bar furthermore provided with a recess and a vertical groove corresponding in width to said recess, said foundation bar adapted to receive said transverse bar and said locking bar, said transverse bar adapted to receive said vertical bars and said horizontal bars, said horizontal bar provided with a transverse groove approximately half the width thereof, with a recess 12 and a cut-away portion 13, said horizontal bar adapted to receive said locking bar, one of said vertical bars provided with a transverse groove, and with a pair of oppositely disposed vertical grooves, and said vertical bar adapted to receive the foundation bar, the horizontal bar and the transverse bar, the other of said vertical bars formed with a pair of transverse grooves, with a vertical groove and a projection, said vertical groove in said second vertical bar constituting a clearance for the locking bar, and said transverse grooves in said second vertical bar constituting a clearance for the foundation bar and horizontal bar.

In testimony whereof we affix our signatures in the presence of two witnesses.

ANDY MURF.
MATHEWS KROMPIGEL.

Witnesses:
MAX H. SROLOVITZ,
C. V. BROOKS.