

April 12, 1932.

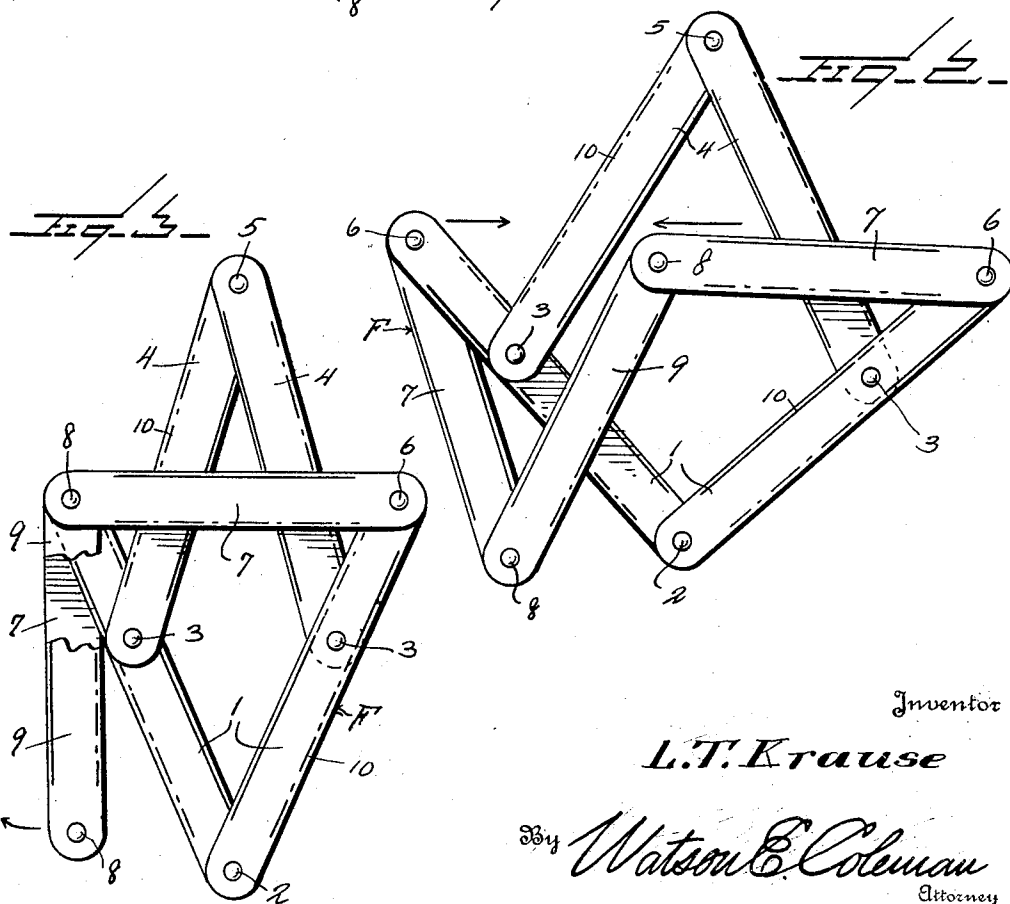
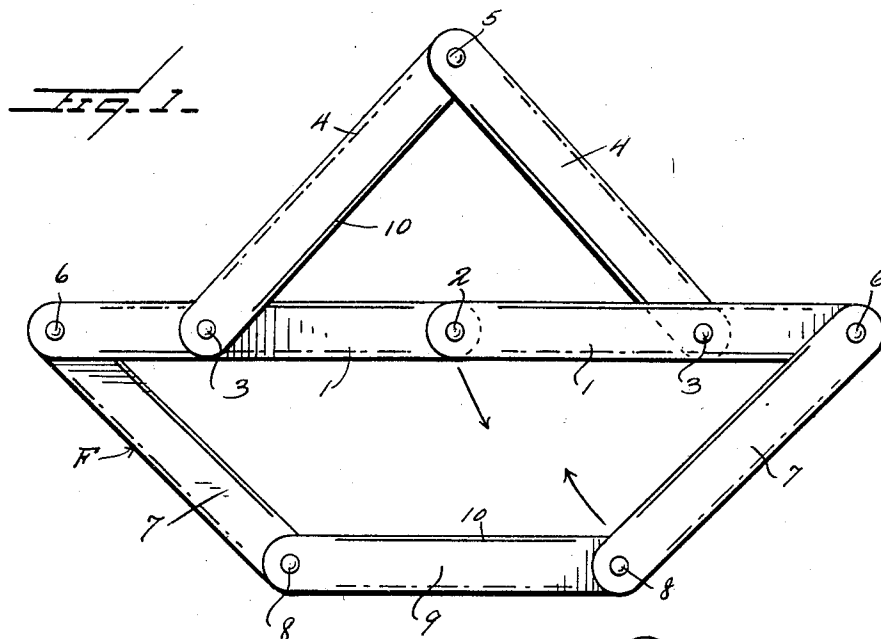
L. T. KRAUSE

1,853,436

PUZZLE

Filed Oct. 9, 1930

2 Sheets-Sheet 1



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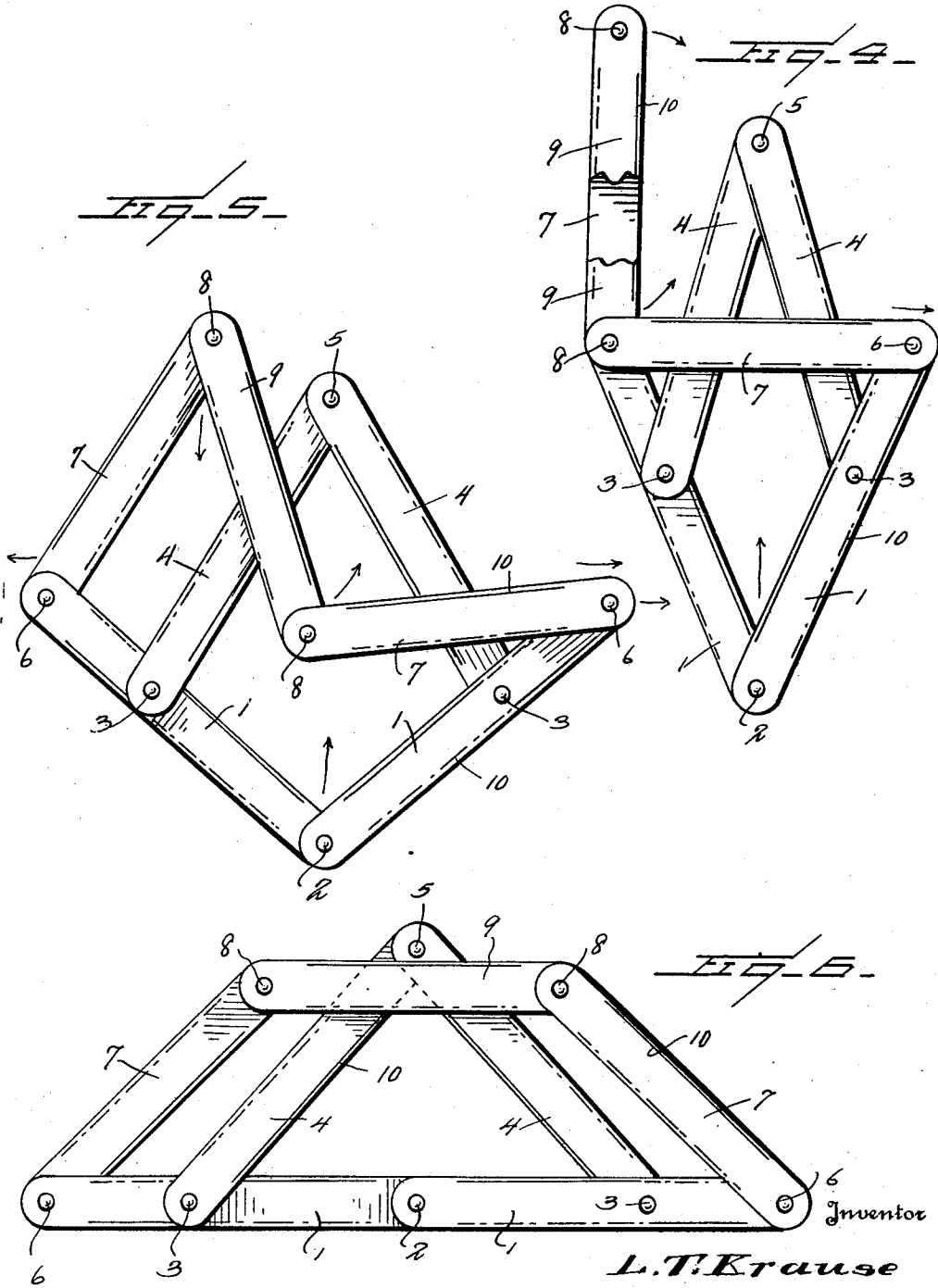
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PUZZLE

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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PUZZLE

Application filed October 9, 1930. Serial No. 487,547.

This invention relates to puzzles and has relation more particularly to a device of this kind embodying foldable and relatively movable strips.

5 It is an object of the invention to provide a device of this kind which, while affording considerable amusement, also requires considerable skill in its solution especially in determining the manner in which the various
10 strips are to be folded or relatively moved in order to accomplish the desired result.

Another object of the invention is to provide a puzzle of this kind comprising a series of pivotally connected strips constituting
15 what may be termed a "frame" together with a pair of additional strips pivotally connected to each other and to adjacent strips of the frame, the purpose of the puzzle being to bring the last two strips within the frame or
20 to a position outwardly of the frame.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:—

25 Figure 1 is a view in plan of my puzzle showing a pair of strips exteriorly of the frame;

30 Figure 2 is a plan view showing an initial adjustment of the strips of the frame in solving the puzzle to bring the pair of strips within the frame;

35 Figure 3 is a view in plan illustrating another step in solving the puzzle;

Figure 4 is a view in plan illustrating a still further step in the solving of the puzzle;

40 Figure 5 is a view in plan illustrating still another step in solving the puzzle;

Figure 6 is a view in plan showing the final step.

As disclosed in the accompanying drawings, my improved puzzle comprises a frame member F consisting of a pair of elongated
45 members or strips 1 having adjacent end portions pivotally connected, as at 2. At a desired point intermediate the ends thereof the strips 1 have pivotally connected thereto, as
50 at 3, the extremities of a pair of strips 4, the opposite or outer extremities of which being

pivotally connected as at 5. The distances between the pivotal connection 3 and the pivotal connection 5 are the same.

As particularly illustrated in the accompanying drawings, it is to be noted that one
55 of the strips 4 overlies one side face of a strip 1 and the second strip 4 overlies the opposite face of the second strip 1.

The outer end portions of the strips 1 have pivotally connected therewith, as at 6, the
60 strips 7, the opposite extremities of which being pivotally connected, as at 8, to an additional strip 9.

The strips 1, 7 and 9 are comprised in the frame F and the purpose of the puzzle is
65 to so adjust these strips to position the strips 4 either outwardly of the frame, as indicated in Figure 1, or to a position disposed inwardly thereof, as illustrated in Figure 6, or vice versa.

It is to be noted that one of the strips 7 overlies the side face of the strip 1 opposite to that with which the end portion of the adjacent strip 4 overlies. By this arrangement one strip 7 overlies a face of one of
75 the strips 1 and the second strip 7 overlies the opposite face of the second strip 1. As clearly illustrated in the drawings, one end portion of the strip 9 overlies one face of a strip 7 and the opposite end portion of said
80 strip 9 overlies the opposite face of the second strip 7. It is to be noted that each of the strips 7 has its extremities overlying the same side faces of the strips 9 and 1 with which it is associated.

With the device in the assembly as illustrated in Figure 1 with the pair of strips 4 outwardly disposed with respect to the frame F, it is the purpose of the puzzle, as hereinbefore stated, to so adjust the various strips
90 to arrange the strips 4 inwardly of the frame as illustrated in Figure 6. Figure 2 of the drawings illustrates in plan substantially the first step in solving the puzzle which consists in moving the pivotal connection 2 in a direction away from the pivotal connection
95 5 between the strips 4 and swinging one of the pivotal connections 8 in a general direction toward the strip 4 remote therefrom. This movement is continued until the pivotal
100

connection 8 just referred to is positioned substantially in register with a pivotal connection 6 remote therefrom when the frame F is in its extended position as illustrated in Figure 1.

5 This operation results, of course, in a further relative contraction of the strips 4, strips 1 and the second strip 7 into substantially a diamond shape as illustrated in Figure 3 with the first link 7 and the strip 9 superimposed one upon the other.

10 While not necessary I find it of advantage to swing the superimposed strips 7 and 9 into a reverse position, as illustrated in Figure 4, and then to pull toward the right the pivotal connection between the superimposed strips 9 and 7 resulting in the arrangement of the various strips as particularly illustrated in Figure 6. To return the strips 4 to the position as illustrated in Figure 1, the steps herebefore recited are reversed.

15 In the present embodiment of my invention it is to be noted that the distances between the pivotal connections 6 and 8 and 8, 8 are the same but that each of such distances is less than that of the space between each of the pivotal connections 3 and 5.

20 I also find it of advantage, to further increase the attractiveness of the puzzle, to provide along the marginal portions of each of the various strips different identities 10, such as lines. The identities of each of the strips may be different in any desired manner, as by color, formation, or otherwise which will readily distinguish one from the other. It is to be noted that these different identities 10 of each of the strips are so arranged that when the puzzle is in one finished adjustment, as in Figure 1, similar identities of all of the strips extend along the outer marginal portions thereof, while when the puzzle is in its second finished adjustment, as in Figure 6, the outer marginal portions of all of the strips are substantially defined by the other lines 10.

25 From the foregoing description it is thought to be obvious that a puzzle constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

60 I claim:—

1. A puzzle consisting of five or more strips pivotally connected end to end to form a closed frame, and two other strips pivotally connected together and to two adjacent

frame strips between the ends thereof, the pivotal connection of the remaining frame strips to said adjacent frame strips being on opposite sides of the latter.

2. A puzzle consisting of at least five strips pivotally connected end to end to form a closed frame, certain of said strips having an adjacent strip at one end thereof engaging one face thereof and the adjacent strip at the opposite end engaging the opposite face thereof, and at least two other strips pivotally connected together at one end thereof and having the free ends pivotally connected to adjacent frame strips intermediate the ends of the latter, the pivotal connection of one of said two other strips to said frame strip being on the side of the frame opposite from the connection of the other of said two strips, and the connection of said two other strips to each other being on sides of the same which are opposite to the sides connected to the frame strips.

In testimony whereof I hereunto affix my signature.

LOUIS T. KRAUSE.