No. 609,941.

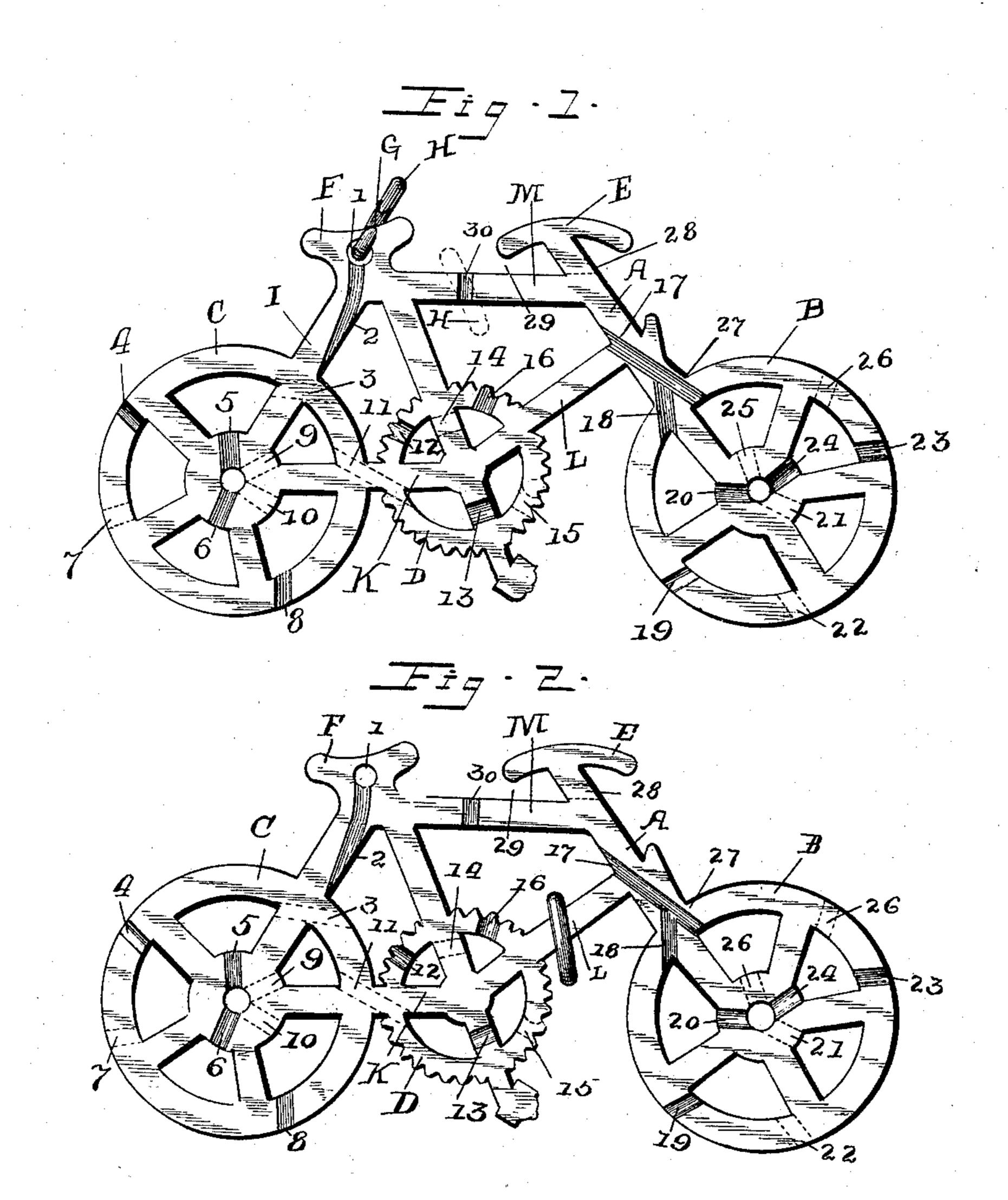
Patented Aug. 30, 1898.

H. E. LEJEUNE.

TOY.

(Application filed Sept. 15, 1897.)

(No Model.)



Henry E. Lejeune,

By Azs Allorneys,

United States Patent Office.

HENRY ERNEST LEJEUNE, OF THIBODEAUX, LOUISIANA.

TOY.

SPECIFICATION forming part of Letters Patent No. 609,941, dated August 30, 1898.

Application filed September 15, 1897. Serial No. 651,761. (No model.)

To all whom it may concern:

Be it known that I, Henry Ernest Le-Jeune, a citizen of the United States, residing at Thibodeaux, in the parish of La Fourche and State of Louisiana, have invented a new and useful Toy, of which the following is a specification.

My invention relates to toys, and particularly to a puzzle having for its basis a construction corresponding in conformation with a bicycle and having for its object to disengage a movable ring from the bicycle, the ring being of the split type, with an open side, insufficient in width to pass over the frame at any point, except such as have been reduced to the required thickness for that purpose.

A further object of the invention is to provide a puzzle of this class which shall be of simple and compact construction, adapting it to be made of such dimensions as to be worn as an ornament, such as a watch-charm.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view of a puzzle, showing the movable ring in its initial position in engagement with the frame of a toy contiguous to that part which represents the saddle and showing in dotted lines the position of the ring preparatory to the final movement by which it is released or disengaged from the frame at a point between said saddle portion and the head portion. Fig. 2 represents the frame of the toy with the ring arranged at an intermediate point occupied thereby in the course of solving the puzzle.

Similar letters and numerals of reference 40 indicate corresponding parts in both figures of the drawings.

The frame or body portion of the toy is constructed in the form of a bicycle having a frame portion A of the diamond type, fixed steering and driving wheel portions B and C, a sprocket-wheel portion D, a head and handle-bar portion E, and a seat portion F, each wheel being provided with a plurality of spokes and the frame or body portion being of uniform thickness throughout, with the exception of reductions or grooves, preferably formed in either or both sides thereof,

whereby the webs at such reduced portions enable the open side G of the ring H to be passed thereover.

passed thereover. The reduced portions or webs of the frame of the toy are numbered consecutively from 1, indicating the initial position of the movable ring, as shown in full lines in Fig. 1, to 30, formed in the upper bar or reach of the 60 frame, which indicates the point at which the final movement of said ring is necessary in order to disengage it from the frame, said webs being numbered in the order in which they are utilized in connection with the ring 65 for moving the latter from its initial to its final position, the latter being indicated in dotted lines in Fig. 1. Tracing the operation from the initial position in engagement with the opening 1, which extends entirely through 70 the saddle portion of the frame, it will be seen that the first step consists in alining the opening in the ring with the web 2 and moving it down to cause the ring to encircle the rear brace I of the frame. The open side of 75 the ring is then alined with the web 3 to cause the ring to engage the upper side of the rear wheel. Then the ring is turned, and the open side thereof is caused to pass over the web 4, thus causing the ring to encircle one of the 80 spokes of the wheel. Then the ring is turned, and the open side thereof passes over the webs 5 and 6 consecutively to cause the ring to encircle the next spoke of the rear wheel. The ring is again turned, and the open side 85 thereof is caused to pass over the web 7 and subsequently the web 8, thus arranging the ring to encircle the third spoke of the wheel. Subsequently the open side of the ring is turned to pass again over the web 6 and then go the web 9 to arrange the ring to encircle the lower bar of the frame portion which corresponds with the fourth spoke of the wheel. Then the ring is turned and its open side is caused to pass over the webs 11 and 5 suc- 95 cessively to arrange the ring to encircle the fifth spoke of the rear wheel. Then the open side of the ring passes a second time over the web 3 to engage the ring with a portion of the driving-wheel in front of the brace I. The 100 ring is then turned to cause its open side to pass over the web 11, and subsequently is again turned to cause said open side to pass over the web 12, thus arranging the ring

within the sprocket-wheel and engaging the horizontal lower brace of the frame, said brace being indicated by the letter K. A subsequent movement of the ring causes its open side to pass over the web 13, and then upon turning the ring its open side may be passed over the web 14 to engage the ring with the lower front brace L. Then the ring is turned to cause its open side to pass over the web 15 and subsequently over the web 16 when

15 and subsequently over the web 16, when it will be found that the ring is engaged with the lower front brace L in front and clear of the sprocket. In this position the ring is shown in Fig. 2, and it is obvious that by fol-

lowing the same method in passing the ring forward and around the front or steering wheel of the frame it may finally be brought to the position in engagement with the upper brace or reach-bar M, as shown in dotted

lines in Fig. 1, when the final alinement of the open side of the ring with the web 30 will enable the same to be disengaged from the frame. Obviously a reversal of this operation must be followed in order to return the ring to its initial position in engagement

with the opening 1.

40 cated in full lines.

In the construction illustrated the grooves or channels formed in the frame of the toy in order to produce the reductions or webs required in solving the puzzle are not made on the same side. On the other hand, it is desirable and adds to the difficulty of solving the puzzle to arrange said channels or grooves alternately on opposite sides of the frame, and on referring to the drawings it will be seen that those channels or grooves which are formed on the opposite or reverse side of the frame are indicated by dotted lines, while

It will be understood that I do not desire to limit myself to the arrangement of those channels or grooves upon either one or both sides, alternately, but that I may arrange the same at opposite sides of the frame at each point where a web is provided. In other

those on the near side are obviously indi-

words, the frame may be reduced by channeling at opposite points to form a web which is located midway between the opposite surfaces thereof.

Various other changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I

claim is—

1. A toy having an open-work frame including a plurality of spoked ring portions connected by interposed bars, said rings, spokes, 60 and bars being provided with reduced or web portions, in combination with a movable split ring, normally engaged with the members of the frame, and having an open side of less width than the thickness of the frame mem- 65 bers, and of sufficient width to receive said web portions, substantially as specified.

2. A toy having an open-work frame, including wheel and connecting frame portions of which the members are reduced at intervals to 70 form webs, and a movable ring engaged with the frame and having an open side of less width than the thickness of the body portion of the frame and of greater width than the thickness of the webs thereof, substantially 75

as specified.

3. A toy having an open-work frame A, B, C, &c., provided at intervals with reduced or neck portions 1, 2, 3, &c., in combination with a ring, engaged with the frame, having an 80 open side of less width than the thickness of the frame, proper, and of greater width than said reduced or web portions, substantially as specified.

In testimony that I claim the foregoing as 85 my own I have hereto affixed my signature in

the presence of two witnesses.

HENRY ERNEST LEJEUNE.

Witnesses:

CHAS. J. COULON, P. CLAUDET.