

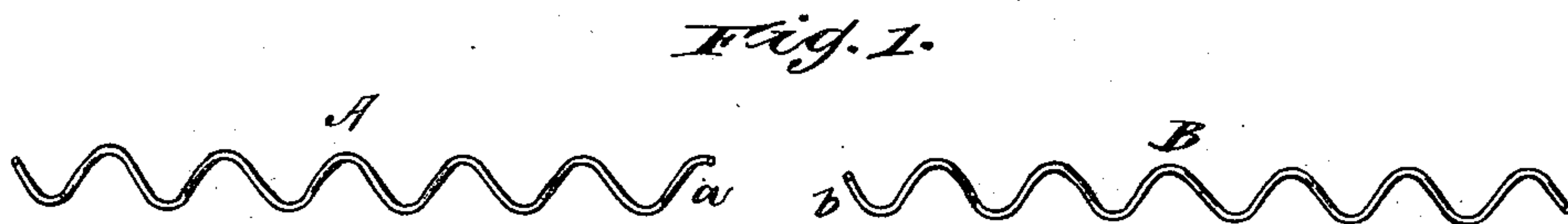
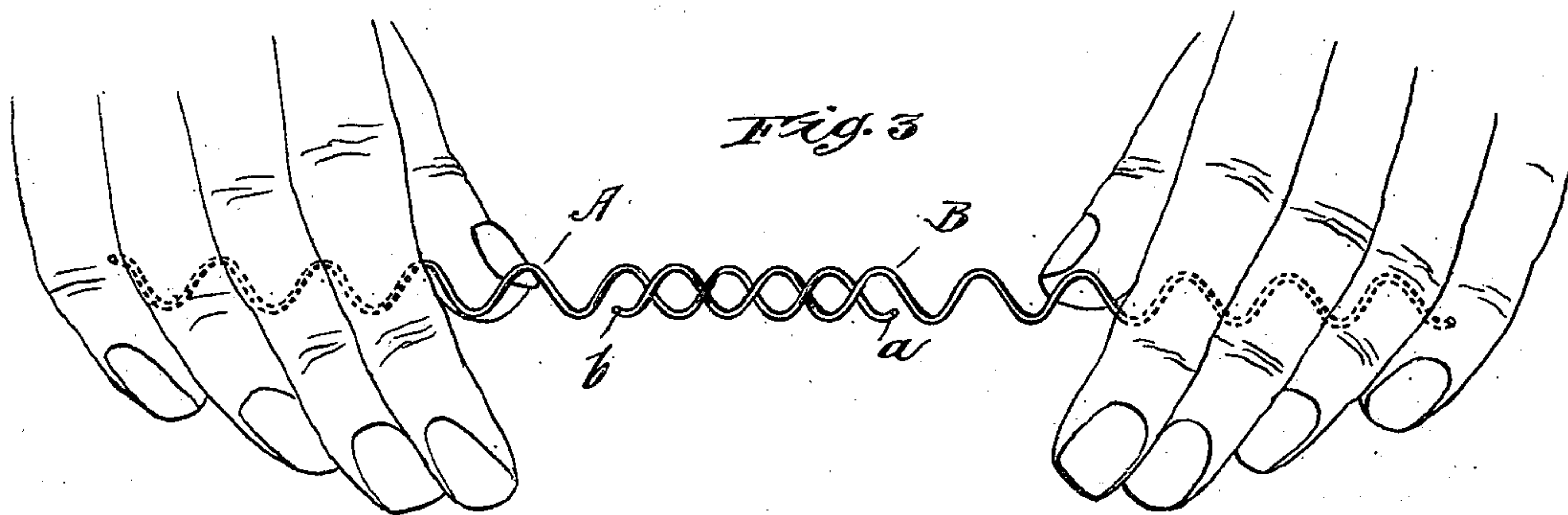
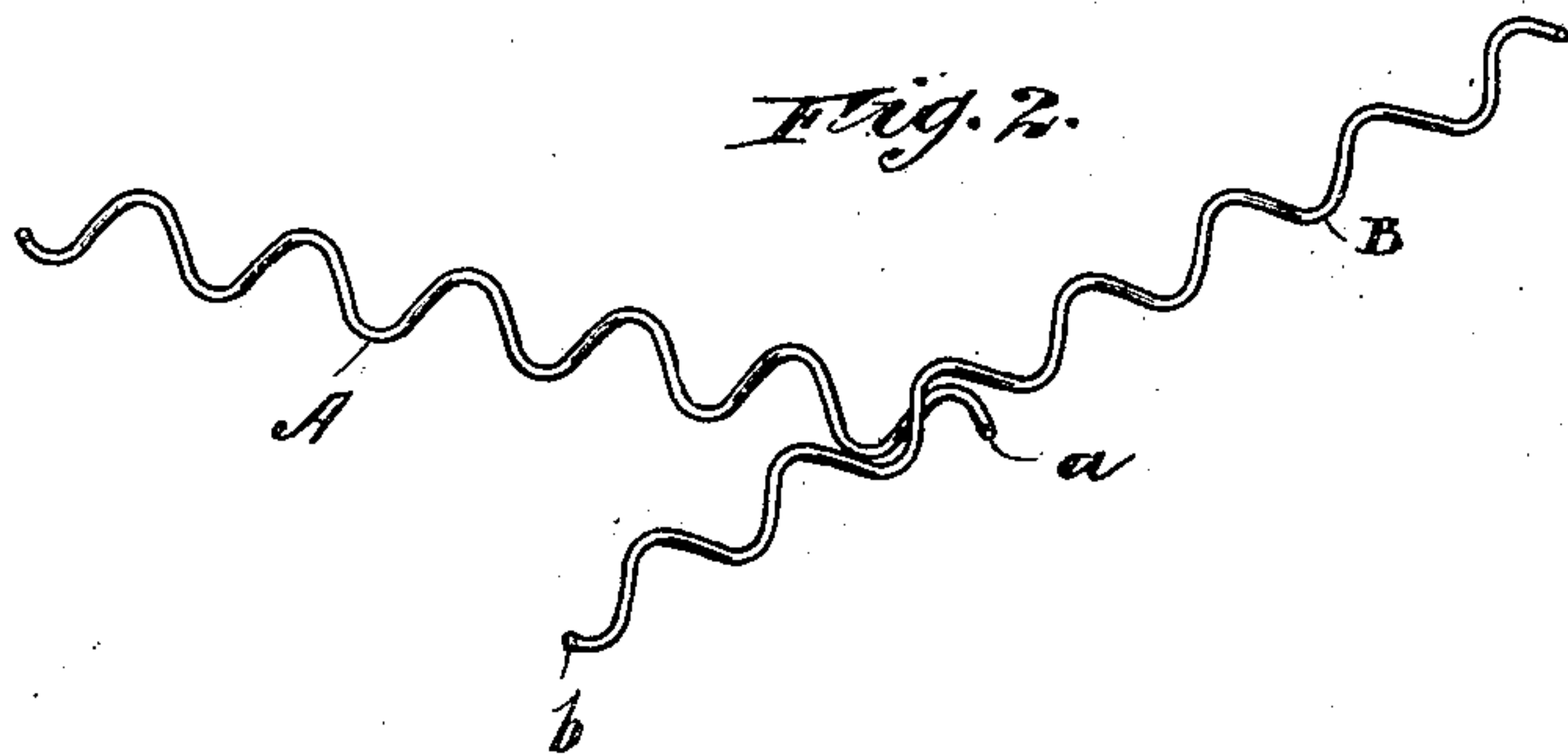
No. 646,403.

Patented Mar. 27, 1900.

T. W. KLIPFEL.  
MECHANICAL TOY.

(Application filed Jan. 22, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

THOMAS W. KLIPFEL, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE UNION  
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## MECHANICAL TOY.

SPECIFICATION forming part of Letters Patent No. 646,403, dated March 27, 1900.

Application filed January 22, 1900. Serial No. 2,295. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS W. KLIPFEL, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Mechanical Toys, of which the following is a specification.

This invention relates to a mechanical toy consisting of two spirally-coiled wires having their ends interlocked, the spirals of the two wires being of reverse twist, so that when interlocked they may be rotated by drawing the disengaged ends of the spirals through the hands, thus creating the optical illusion that the spirals are becoming disengaged, whereas, in fact, the wires are simply turning in the hands of the operator.

This invention is illustrated in the accompanying drawings, in which—

Figure 1 shows the two wires separated. Fig. 2 shows the wires ready to be interlocked, and Fig. 3 is a perspective view showing the spiral wires interlocked and the position in which the disengaged ends of the wires are grasped to produce the movement and illusion above mentioned.

In the drawings, A B represent the wires, which have spiral coils of like diameter and pitch, but of reverse direction, the wire A having left-hand coils *a* and the wire B having right-hand coils *b*. The coils *a* may be of slightly-greater diameter than the coils *b* to enable them to be engaged, which is effected by placing the wires in the position shown in Fig. 2 and then moving the free end of the wire A around the wire B, thus frictionally interlocking or engaging the coils, as shown in Fig. 3. If the coils of one of the wires is of sufficiently-greater diameter than the other, the wires may be thus interlocked by screwing them into engagement endwise; but for all practical purposes said coils are of substan-

tially the same diameter. As shown in the drawings, three of the coils are interlocked, and when the disengaged ends (shown by the dotted lines) are grasped between the thumb and finger of both hands and the hands are separated or drawn apart the movement will result in rotating the wires, which will produce the illusion that the wires are moving longitudinally in a manner to separate their engaged coils, when as a matter of fact they are simply rotating and the engaged coils do not move upon each other. The size and pitch of the coils, the length of the wires, and the number of coils in engagement and their manner of engagement may be varied, and instead of round wires flat wires may be used.

This toy is of simple construction and can be readily made from the scrap of such wire-working factories as produce wire mattresses, mats, and the like, and the toy itself is useful in demonstrating certain movements and the effects thereof produced upon the eye.

I claim—

1. A mechanical toy consisting of two spirally-coiled wires, the coils of the said wires being respectively of reverse twist and the two wires having their end portions only telescoped together and the overlapping coils thereof interlocked.

2. A mechanical toy comprising in combination two wires having coils of the same pitch and of substantially the same diameter, the coils of one of said wires being of right-hand twist and the coils of the other wire being of left-hand twist and portions only of said wires being overlapped and their coils interlocked, substantially as described.

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