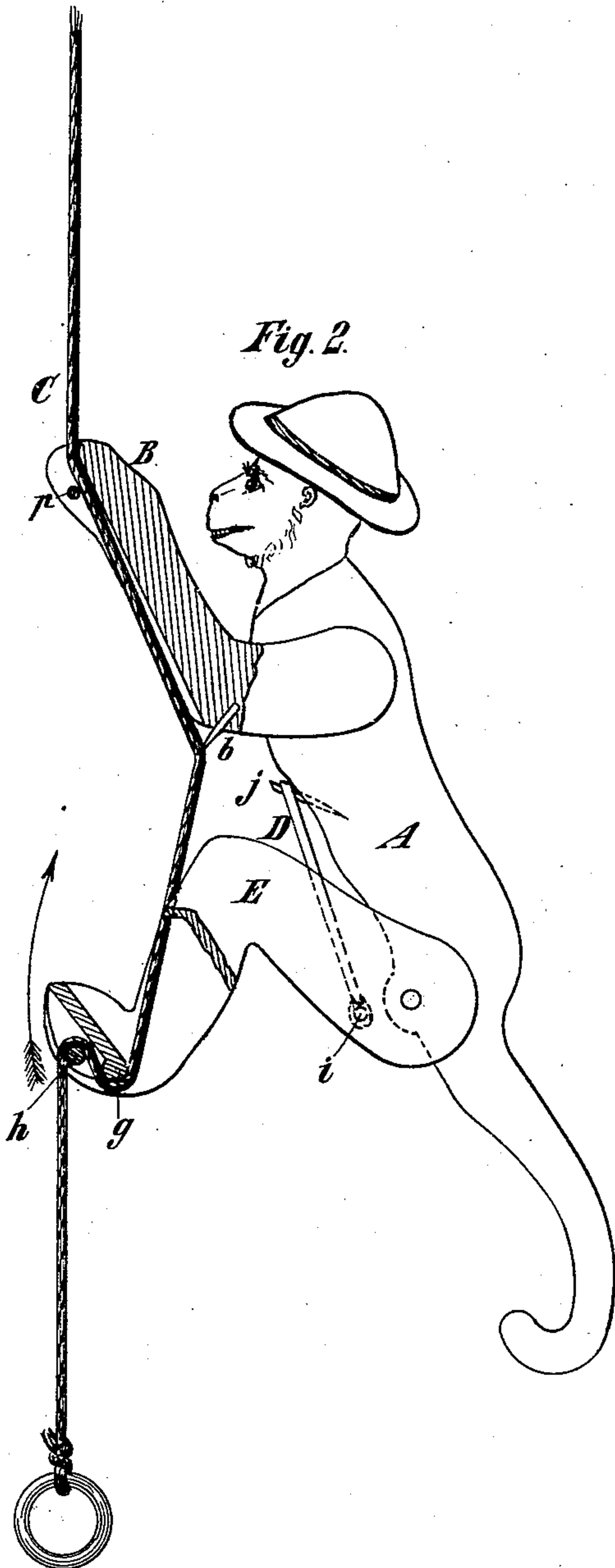


(No Model.)

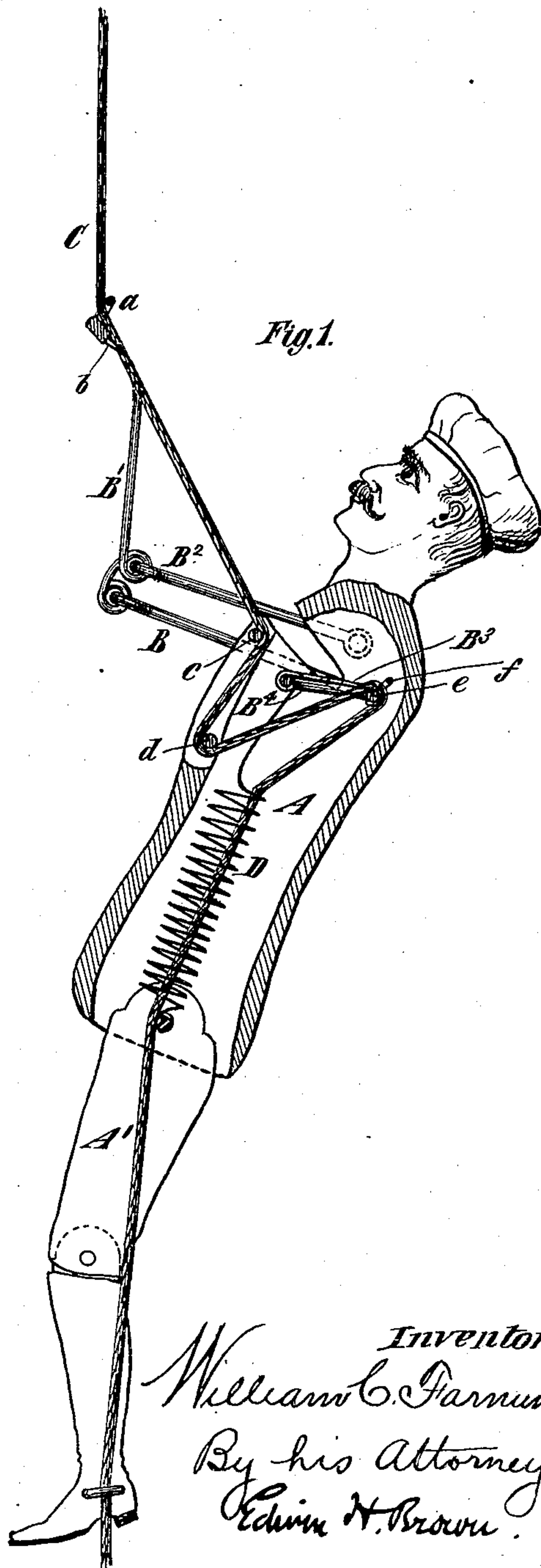
W. C. FARNUM.
Climbing or Traveling Toy.

No. 243,439.

Patented June 28, 1881.



Witnesses
Fred Haynes
Thomas E. Birch.



Inventor
William C. Farnum.
By his Attorney
Edwin H. Brown.

UNITED STATES PATENT OFFICE.

WILLIAM C. FARNUM, OF HOOSICK FALLS, NEW YORK.

CLIMBING OR TRAVELING TOY.

SPECIFICATION forming part of Letters Patent No. 243,439, dated June 28, 1881.

Application filed May 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. FARNUM, of the village of Hoosick Falls, in the county of Rensselaer and State of New York, have
5 invented certain new and useful Improvements in Climbing or Traveling Toys, of which the following is a specification.

My present improvements relate to toys and other articles which are designed to climb or
10 travel along a line or cord, such as are shown in Letters Patent No. 240,510, granted to me April 26, 1881. In such a toy or article a propelling device and a grasping or holding device are so combined that the grasping or
15 holding device will maintain the position of the toy on the line or cord while the propelling device moves to take a new hold on the cord or line, and will release the line or cord when the propelling device operates to propel
20 or advance the toy.

One object of my present improvements is to provide a simple means whereby either of said devices may be reliably engaged with, and yet easily disengaged from, the line or
25 cord.

To this end my improvements consist in the combination, with such a device, of a pin or pins, or point or points, adapted to engage with the line or cord.

30 The improvements also consist in the combination, with the propelling device of such a toy, of a lever and appurtenances whereby a pull or tension on the line or cord will serve to actuate the propelling device to take a new hold of the line or cord, and a spring, whereby the propelling device will be operated so as to effect the propulsion of the toy.

40 In the accompanying drawings, Figure 1 is a sectional side view of a toy embodying my improvements, and Fig. 2 is a similar view of a toy of modified form embodying certain of my improvements.

Referring, first, to Fig. 1, A designates the body of the toy, which, as here shown, is made
45 in the form of the body of a man having legs A' jointed to it.

50 B designates rods or bars having a pivotal connection with the body A, and B' designates rods or bars having a pivotal connection with the rods or bars B, and joined together at their outer end. These rods or bars B B'

are located in a position to represent the arms of a man. When they are swung upward a rod, B², having a pivotal connection with the body A, and also with one of the rods or bars B B', above its connection with the corresponding rod or bar B, straightens out the rods or bars B' approximately into line with the rods or bars B, and when they are swung downward the said rod B² swings the rods or bars B' close to the rods or bars B. Thus the motion of the arms of a man are simulated. At the junction of the two rods or bars B' they are provided with a loop or eye, a, through which a line or cord, C, passes, and also with a device consisting of one or more pins or points, b, which is adapted to engage with the cord. This cord passes behind a pin, c, in the front portion of the body A, then around a pulley or sheave, d, arranged below said pin, but also at the front portion of the body A. Then it passes around a pulley or sheave, e, which is arranged upon an extension, B³, of the rods or bars B, extending rearward of their pivotal connection with the body A, but inside the latter. Over the pulley e is a bar, f. A portion, B⁴, of the bars B, extending forward of their pivotal connection with the body A, has connected to it a spring, D, which at the lower end is connected to the body A, and tends to pull the said portion B⁴ downward. The portions B³ and B⁴ of the bars B may be regarded as a lever.

A tension or pull on the cord C pulls down the portion B³ of the rods or bars B and raises the rods or bars B B', thereby presenting the pins or points b at such an angle to the cord C that at the slightest retrogressive motion of the said rods or bars B B' the said pins or points will engage with the cord. As soon as the tension or pull on the cord terminates the spring D, acting on the portion B⁴ of the rods or bars B, raises the toy till the body A and rods or bars B B' occupy their former relative position. As soon as the tension or pull is put on the cord again the rods or bars B B' are raised as before, and the pins or points b are thereby disengaged from the cord. The portion B³ of the rods B and the pulley e serve to hold the toy against slipping down on the cord, while the rods or bars B B' rise and are disengaged from the cord; hence I term these

parts a "grasping" or "holding" device. The rods or bars B B', with their pins or points *b*, I term a "propelling" device.

Referring, now, to Fig. 2, A designates the body of the toy, the same being, as here shown, made to represent the body of a monkey.

B designates extensions from the body, representing arms or fore legs in an elevated position, as they would be in climbing. At or near the top the arms or extensions B are provided with a guide-pin, *p*, and at the point representing the elbow is a grasping or holding device consisting of one or more pins or points, *b*.

E designates a lever made in the form of the legs of a monkey, and pivoted to the lower part of the body A. As shown, it consists of two parts passing one on each side of the body A, and at the other end it is provided with two bars, *g h*. Pulleys or sheaves may be employed in lieu of these bars, if desirable. An india-rubber band or spring, D, connected to a pin, *i*, on the lever E, and to a pin, *j*, on the body A, raises the lever when it is not otherwise actuated. A line or cord, *c*, passes behind the guide-pin *p*, and thence around the bars *g h* in reverse directions. A tension or pull on this cord tends to bring the cross-bars *g h* downward or backward, so that the cord can more nearly straighten out, and thus the body A is impelled upward or forward along the cord. The lever and cross-bars therefore constitute a propelling device. When the cord has thus been pulled as far as it can be, the one or more pins or points *b* engage with the line or cord and hold the toy in position on the cord, while the spring D raises the lever E for another operation. As soon as the tension or pull is put on the line or cord again the line or cord is disengaged from the one or more

pins or points *b*, so as to leave the body A free to advance again. The one or more pins or points *b* are very desirable, either as a grasping or holding device, or in a propelling device.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a toy or article designed to travel along a line or cord, a grasping or holding device and a propelling device so combined that the grasping or holding device will hold the toy or article on a line or cord while the propelling device moves to take a new hold, and will be released from the line or cord when the propelling devices operate to advance the toy or article, one of said devices being furnished with one or more pins or points for engagement with the line or cord, substantially as specified.

2. The combination of the body A, rods or bars pivoted thereto, and provided with means for engaging with a line or cord, the pulley or sheave *d*, and the extension B³ of the rods or bars B, substantially as specified.

3. The combination of the body A, rods or bars B B' B², pulley or sheave *d*, and the extension B³ of the rods or bars B, substantially as specified.

4. The combination of the body A, rods or bars B B' B², pulley or sheave *d*, and the extension B³ of the rods or bars B, carrying the pulley or sheave *e*, substantially as specified.

5. The combination of the body A, rods or bars B B' B², loop or eye *a*, one or more pins or points, *b*, pin *c*, pulley or sheave *d*, and the extension B³ of the rods or bars B, substantially as specified.

WILLIAM C. FARNUM.

Witnesses:

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