

(No Model.)

C. N. NEWCOMB.

LOOM SHUTTLE.

No. 330,144.

Patented Nov. 10, 1885.

Fig. 1.

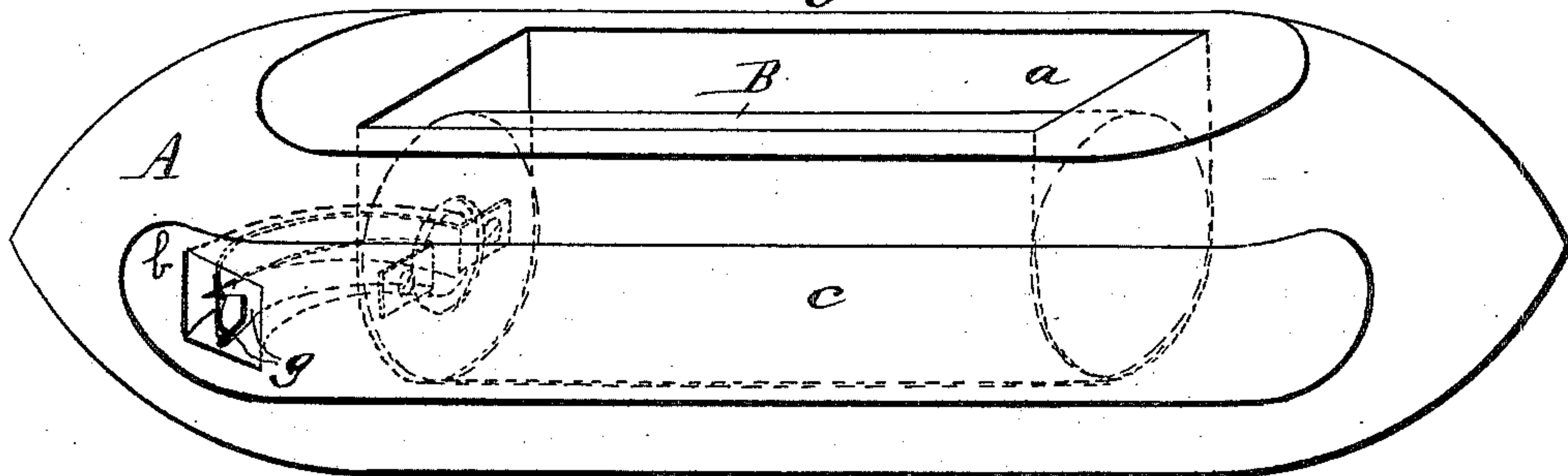


Fig. 2.

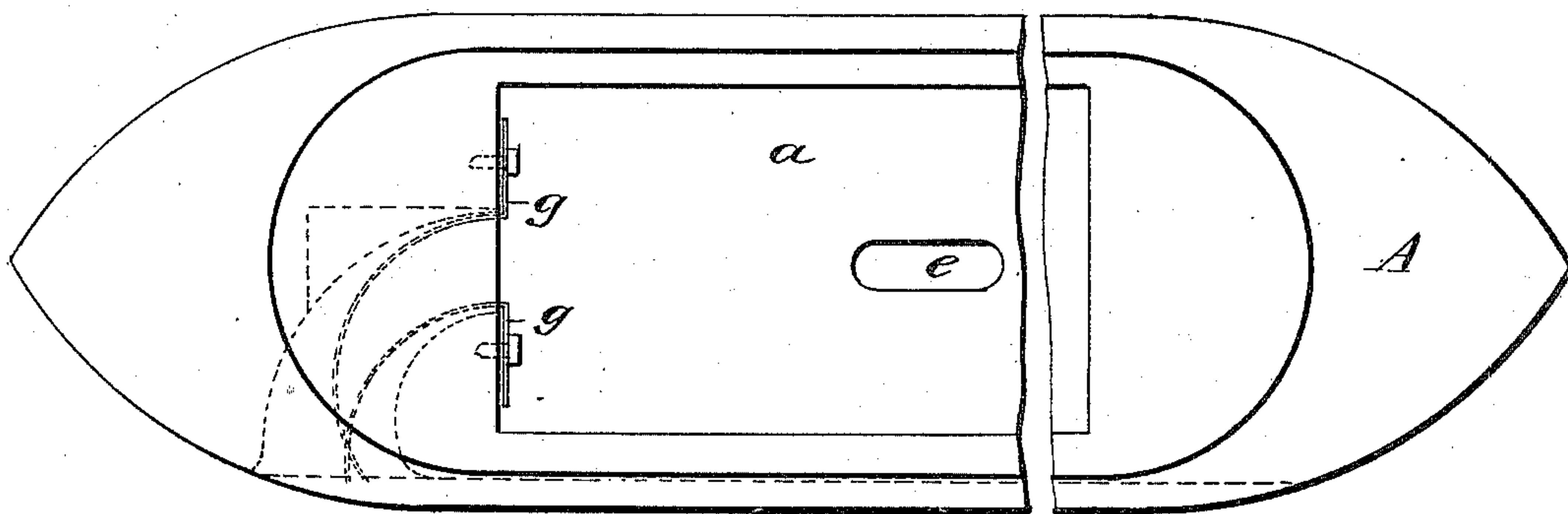


Fig. 3.

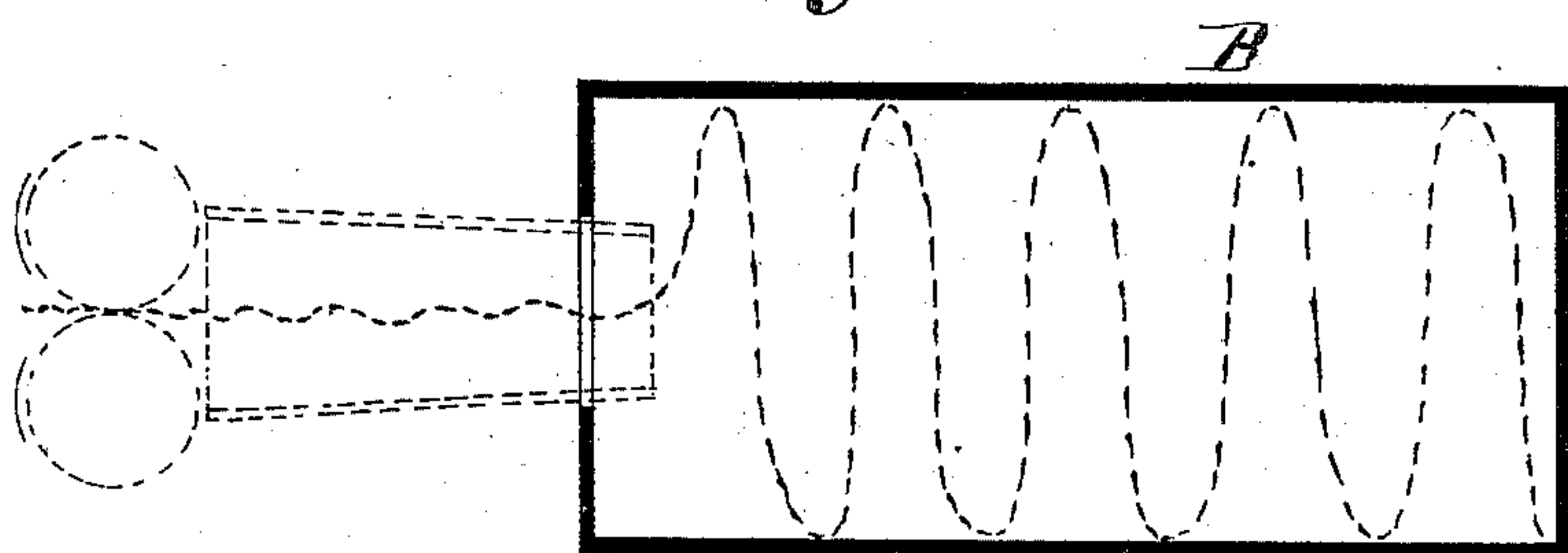


Fig. 4.

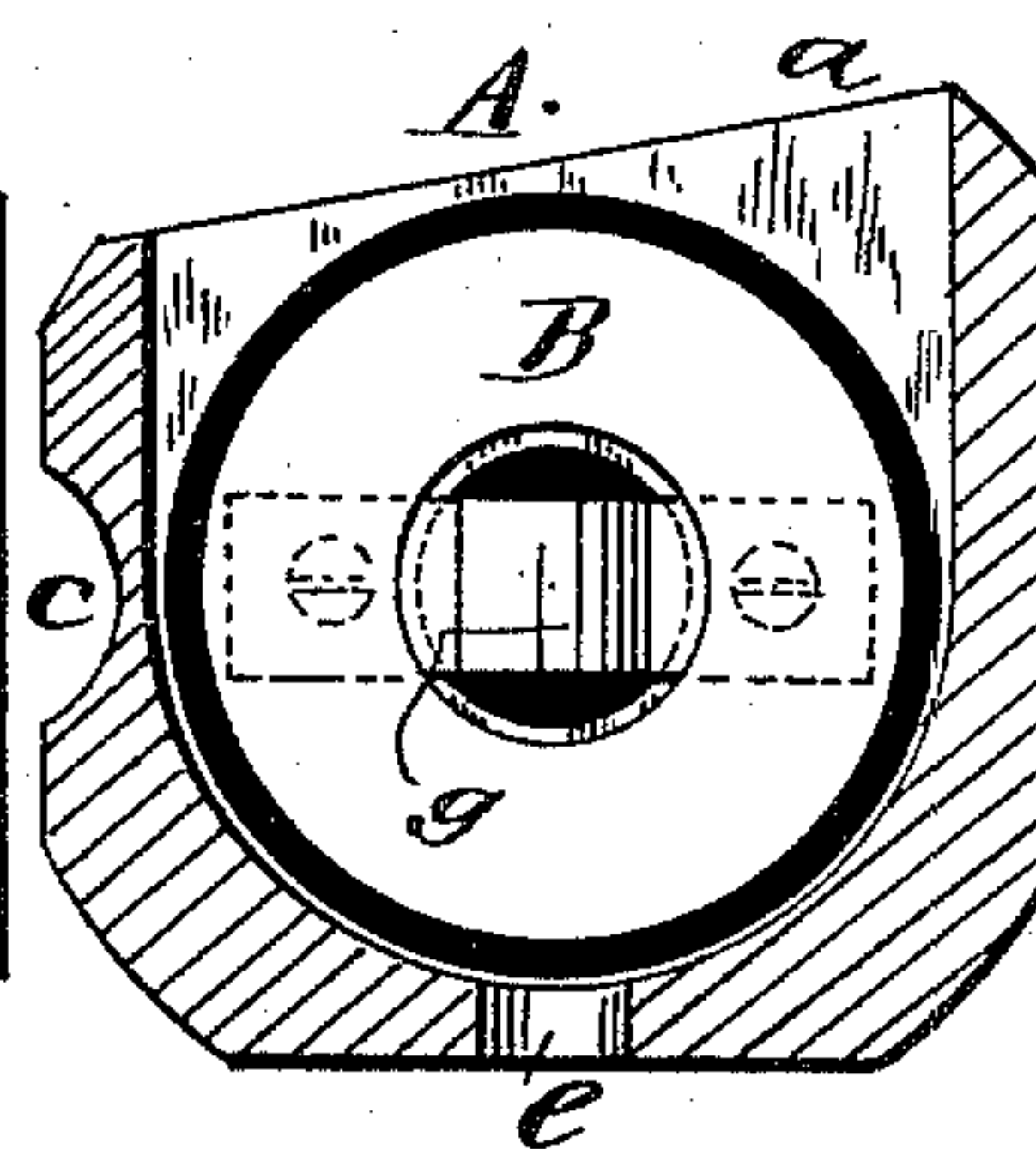
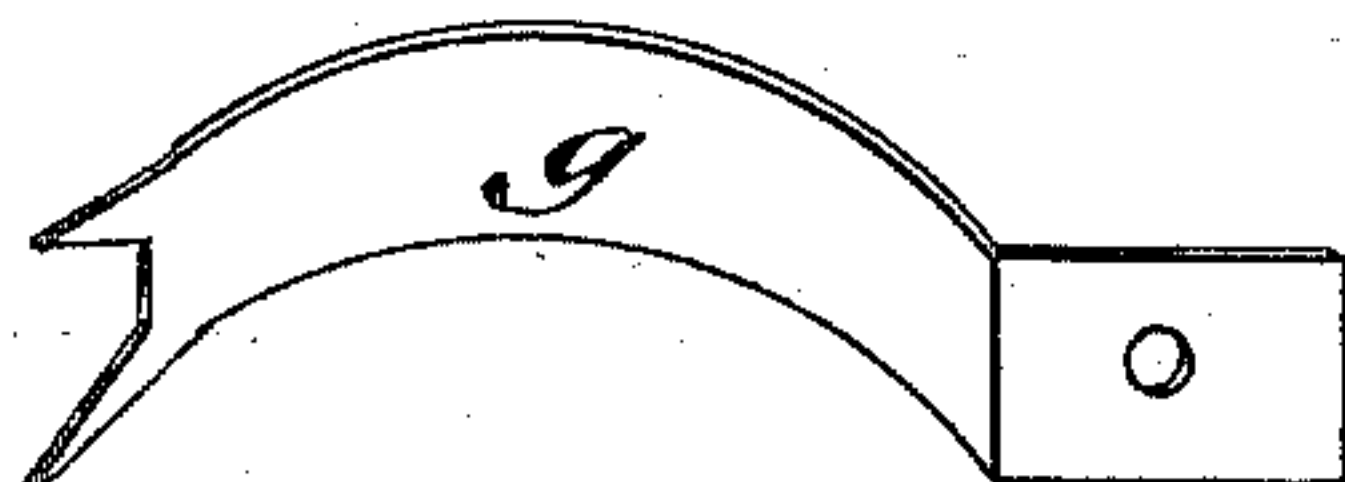


Fig. 5.



WITNESSES:

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CHARLES N. NEWCOMB, OF OMAHA, NEBRASKA.

LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 330,144, dated November 10, 1885.

Application filed July 22, 1884. Serial No. 138,450. (No model.)

To all whom it may concern:

Be it known that I, CHARLES N. NEWCOMB, of Omaha, in the county of Douglas and State of Nebraska, have invented a new and useful
5 Improvement in Loom-Shuttles, of which the following is a full, clear, and exact description.

In weaving rag-carpets, shuttles such as are used with ordinary looms cannot be used
10 for several reasons. In the first place, the tension must be very light or the rags will break; second, they must not be twisted, as heavy rags will not beat up tightly if twisted, so that a cop in the shuttle will not answer;
15 and, third, the rags must have a free exit from the shuttle on account of the ravelings and the tendency to pack.

My invention consists in a shuttle provided with tension-regulating springs projecting into its eye, and a rag-receiving can having an open end adapted to be placed within the shuttle-body, the whole being designed especially for rag-carpet looms, and adapted to obviate the difficulties experienced with
20 ordinary shuttles, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate
30 corresponding parts in all the figures.

Figure 1 is a side perspective view of the shuttle with the can placed therein. Fig. 2 is a top view of the shuttle with the can removed. Fig. 3 is a section of the can. Fig.
35 4 is a cross-section of the shuttle complete, and Fig. 5 shows one of the tension-regulating springs.

The shuttle-body A is of usual form, and made of any suitable material, and is formed
40 with a long recess or pocket, *a*, open on the upper side. At one end of the shuttle-body is the feed aperture or eye *b*, extending from the recess *a* out at the front side, such side being grooved lengthwise at *c* to give freedom
45 to the weft.

B is the can, preferably made of metal in cylindrical form, and of a length to fit the

recess of the shuttle-body snugly. One end of the can is left open or made with an aperture.

The delivery-eye *b* of the shuttle-body contains two flat springs, *g*, of thin elastic metal, which are attached by screws, as shown in Figs. 2 and 4, to the body of the shuttle. The
50 outer ends of these springs are forked, as in Fig. 5, and the forked ends come together near the outer end of the eye *b*. Their function is that when the can is full of rags and a loop forms the springs will open and allow
55 the loop to pass, and then closing will hold the rag with tension enough to straighten the loop. This prevents the eye, which is usually small, from becoming choked.

The can is to be filled with the rags run in loosely by any suitable mechanism—such, for
65 instance, as a pair of rollers driven by any suitable means, and a conical tube projecting into the can, as shown by dotted lines in Fig. 3—and when full the can is placed in the shuttle-body and the end of the weft drawn
70 out at the eye *b*. The can will hold a large quantity of rags, and deliver the weft with a light and uniform tension and without twisting. When empty, the can is pushed out by a tool inserted through a hole, *e*, in the bottom of the shuttle-body and a filled can then
75 put in.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the shuttle-body
80 A, provided with the eye *b*, of the springs *g*, having forked outer ends and projecting into the eye of the shuttle-body, substantially as herein shown and described.

2. The combination, with the shuttle-body
85 A, provided with the recess *a* and the eye *b*, and the springs *g*, projecting into the eye of the shuttle-body, of the rag-receiving can B in said recess, having one end open, substantially as herein shown and described.

CHARLES N. NEWCOMB.

Witnesses:

MILTON FUSON,
J. W. REYNOLDS.