

C. M. ROULLIER.

Floor-Mat.

No. 164,333.

Patented June 8, 1875.

Fig: 1

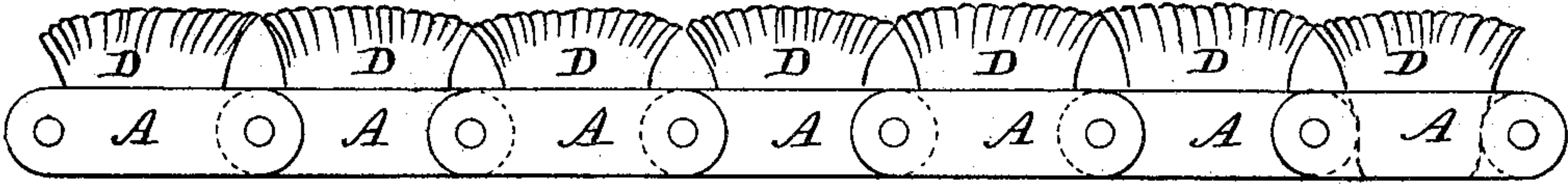


Fig: 2

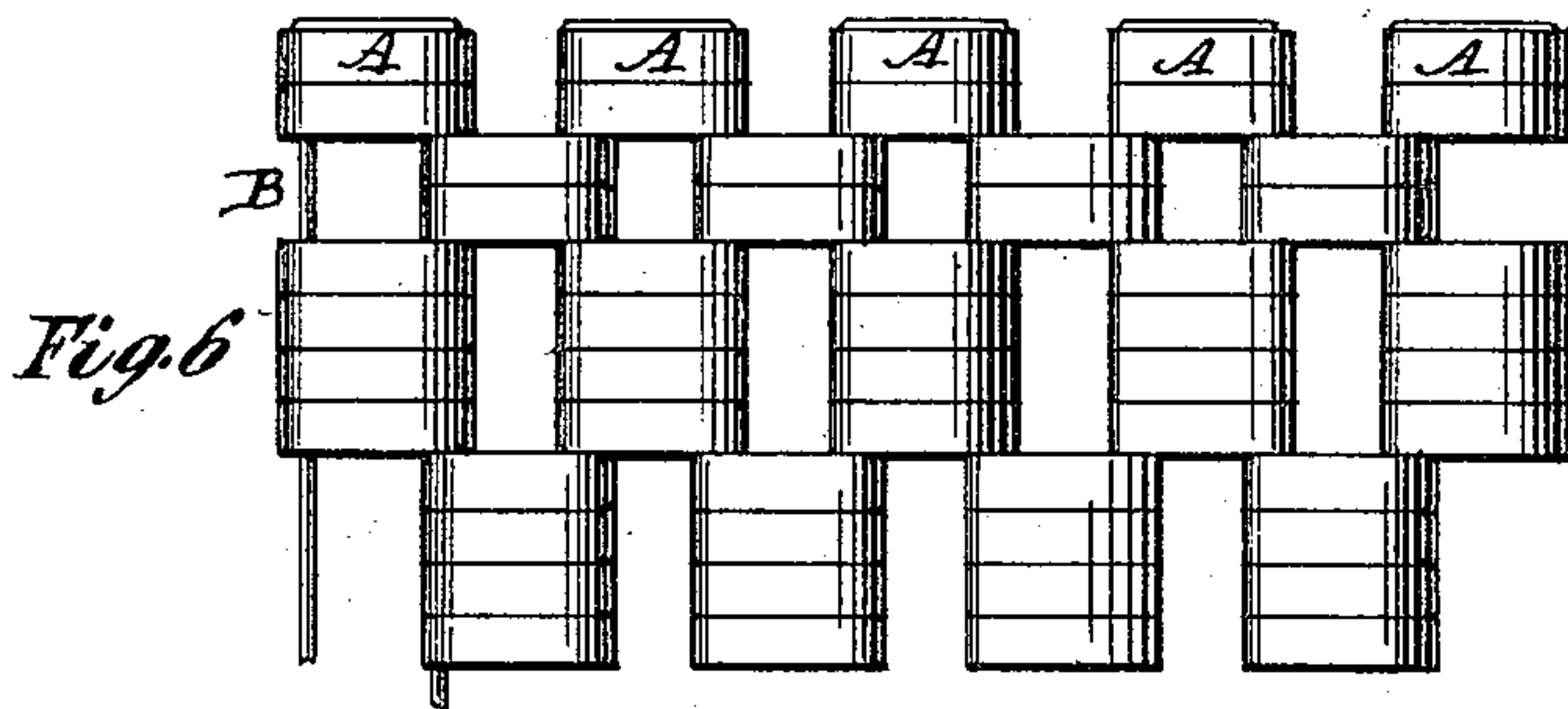
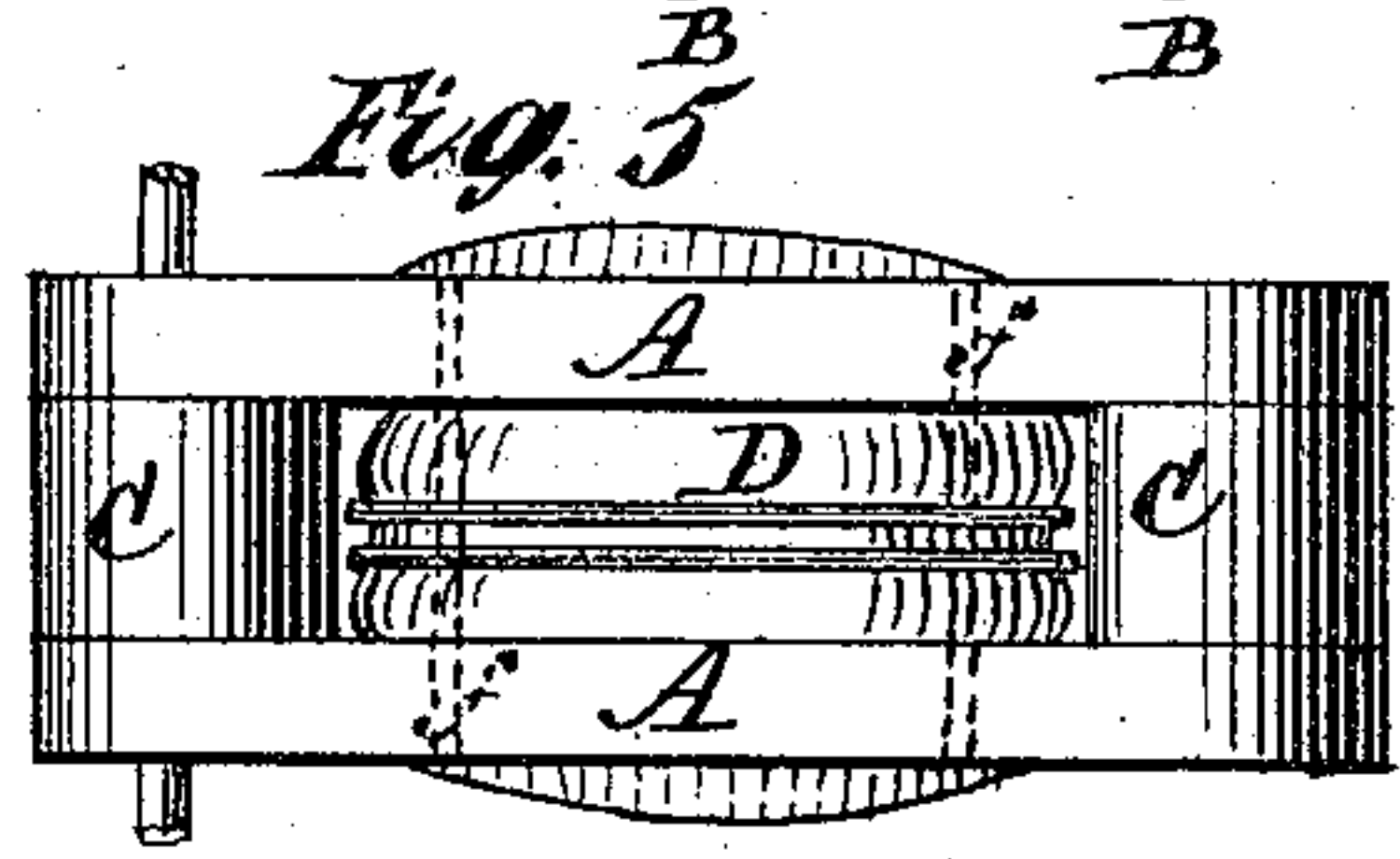
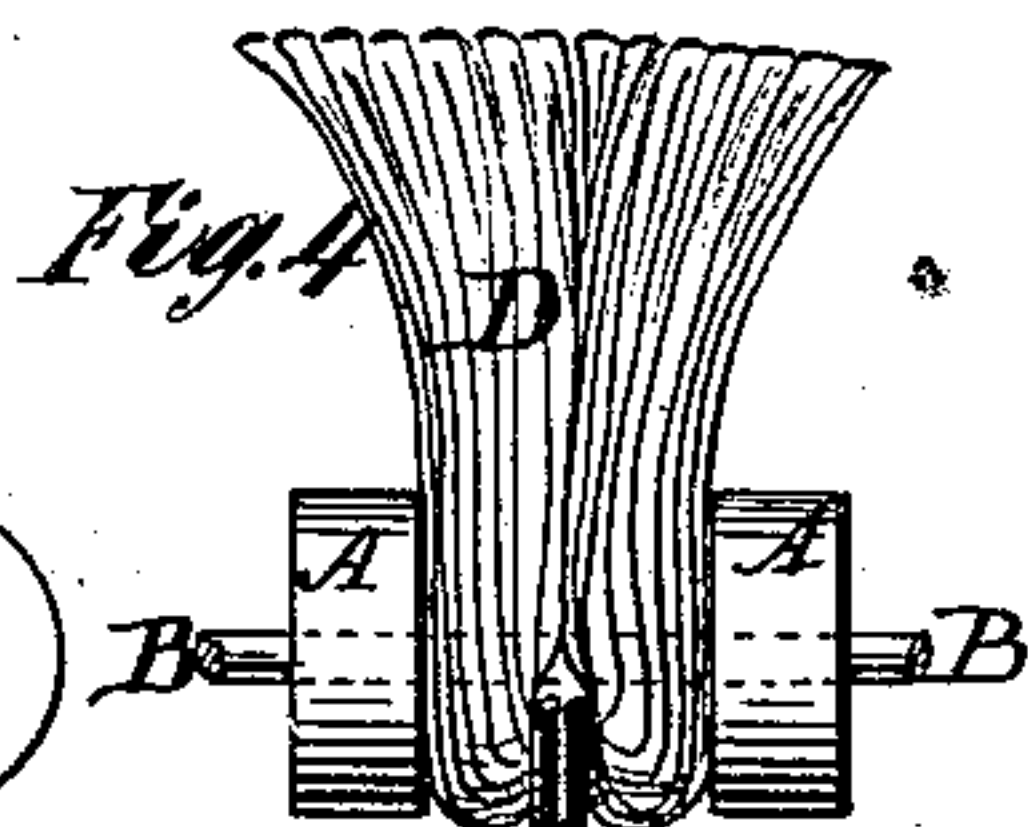
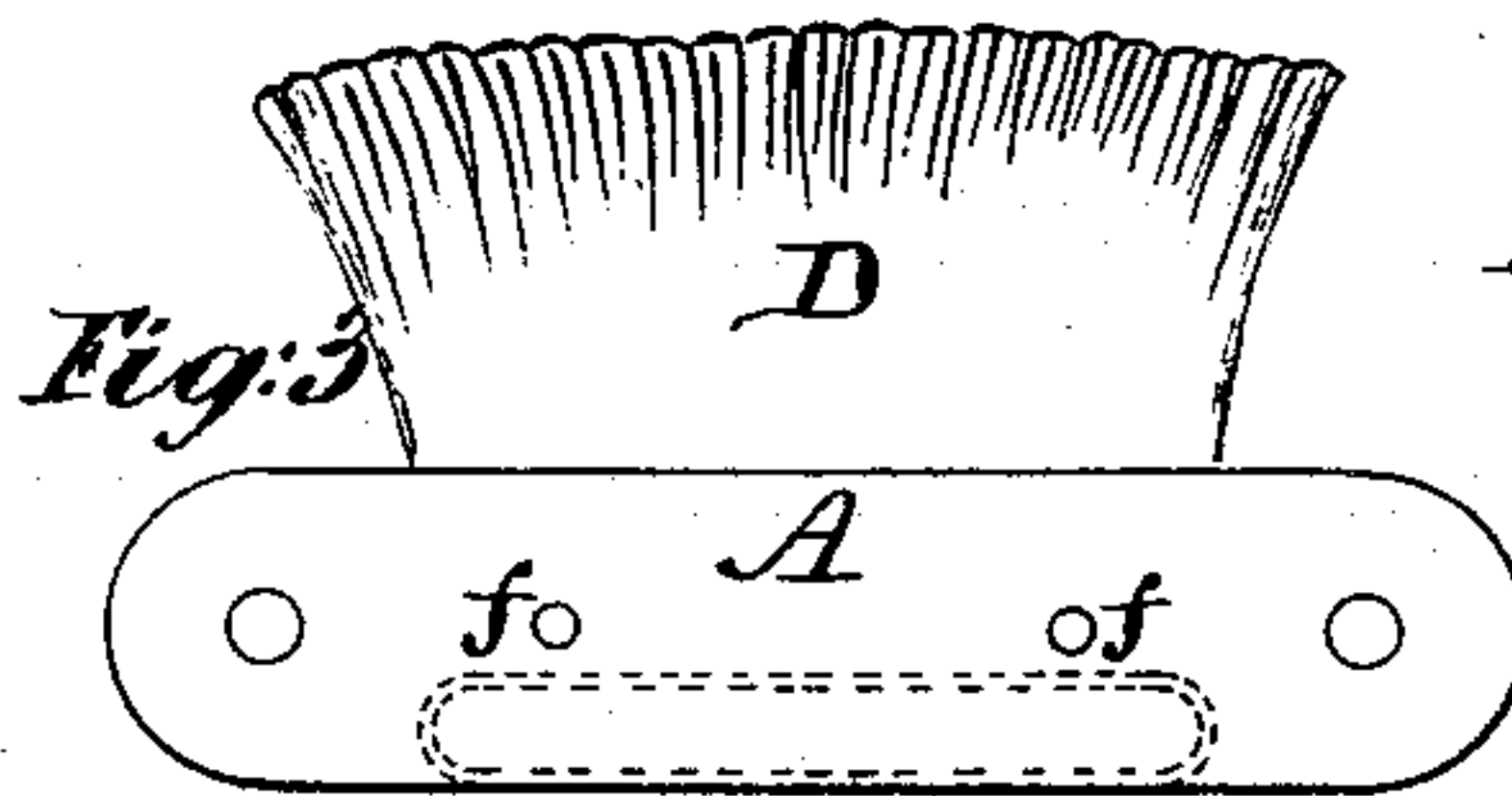
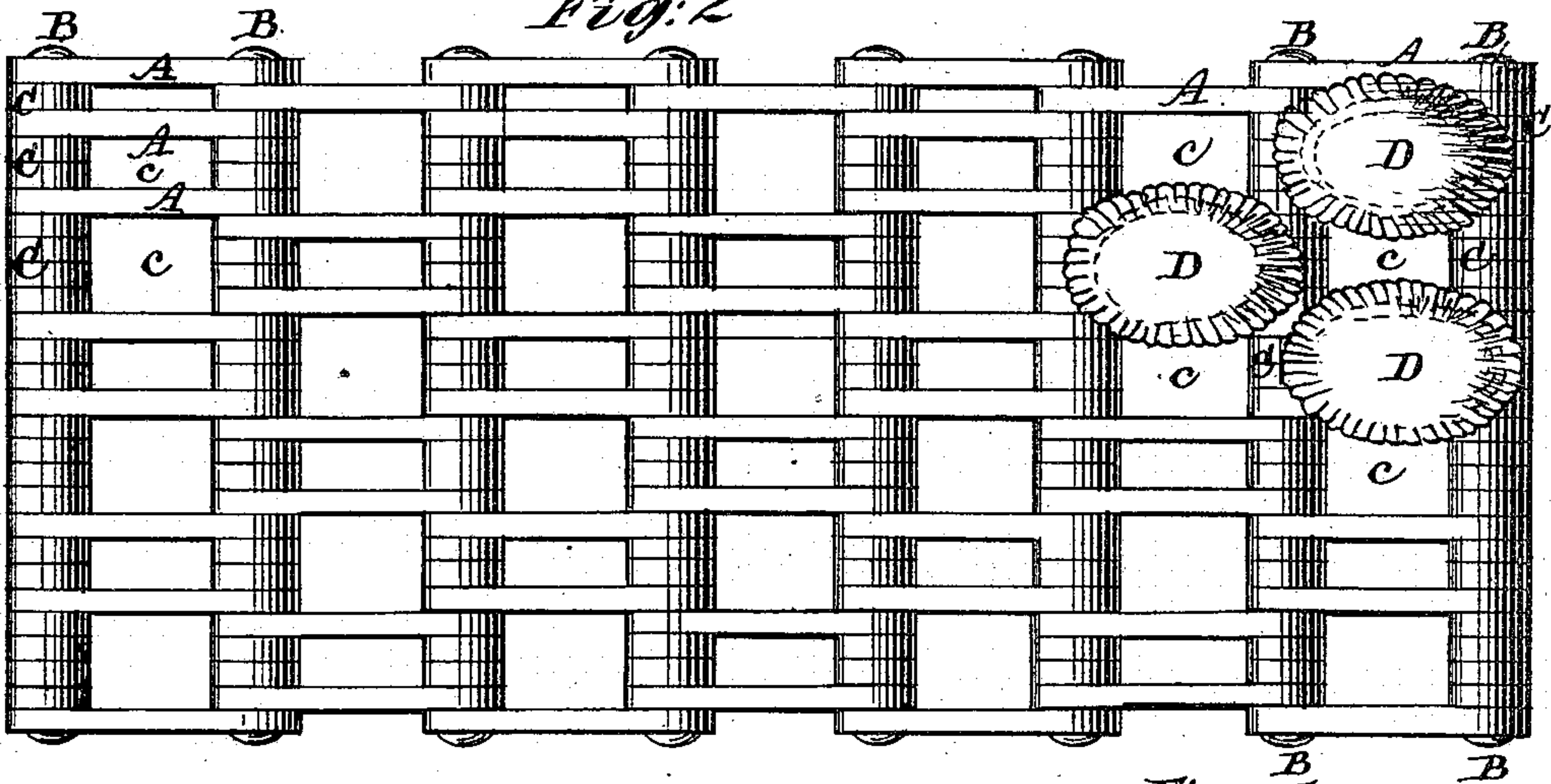


Fig: 7



Witnesses:

Michael Ryan,
Fred Haynes

C. M. Roullier
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UNITED STATES PATENT OFFICE.

CHARLES M. ROULLIER, OF PARIS, FRANCE.

IMPROVEMENT IN FLOOR-MATS.

Specification forming part of Letters Patent No. **164,333**, dated June 8, 1875; application filed April 12, 1875.

To all whom it may concern:

Be it known that I, CHARLES MARIEN ROULLIER, of Paris, France, have invented certain Improvements in Carpets and Mats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to certain improvements in the manufacture of carpets and mats, whereby many of the inconveniences experienced in those of ordinary construction are obviated.

The invention consists in a self-cleaning mat or carpet, composed of a series of brushes or tufts of fibrous material, or of metallic or other elastic plates, in combination with an articulated foundation of novel construction, the brushes, tufts, or plates being arranged with interstices between them, whereby the dirt is allowed to fall to the floor, instead of remaining on the upper side of the mat or carpet.

The invention consists, further, in certain details of construction, whereby the mat or carpet is rendered reversible.

In the accompanying drawing, Figure 1 is a side or edge view of a mat constructed according to my invention. Fig. 2 is a top view of the same. Figs. 3, 4, and 5 are detail views of the same. Fig. 6 is a top view, and Fig. 7 a side or edge view, of a reversible mat or carpet, which is considered as a modification of my invention.

The articulated foundation is composed of links A, having their ends connected to each other by rods B, upon which are bracing or separating washers C. The links may be made of wood, leather, metal, or other suitable material. The rods are preferably made of galvanized iron or other non-corrosive metal. The bracing and separating washers may be made of wood, leather, rubber, or other suitable material. The length of the mat or carpet is dependent on the number of links arranged lengthwise, and the width depends upon the number of links arranged side by side, and the number and thickness of the washers interposed between them. The rods B pass through the washers, and the ends of the links and the ends of the wires may be secured by riveting or otherwise.

By this means an articulated foundation is constructed, which may be made of any suitable width, according to the length of the rods, and may be extended longitudinally to any desired degree by adding more links in a longitudinal direction. The joints formed by the rods passing through the links allow the mat to adapt itself to any irregularities in the surface upon which it may be placed, and also enable it to be rolled into a small compass when desired.

By the interposition of the washers between the links, intervals or interstices *c* are formed in the articulated foundation. In these interstices are placed brushes D, which may be composed of tufts of any suitable material, such as cocoa fiber, bristles, horse-hair, felt, cloth, vegetable silk, &c., or of plates or strips of metal, rubber, or any other suitable elastic substance. When made as shown herein, the brush consists of a tuft of cocoa fiber, bound midway of its length with metallic wire, and then doubled, so as to bring the ends of the fibers together. The brush thus formed is inserted in one of the interstices *c*, with the ends of the fibers uppermost, and is secured in place by means of pointed pins or studs *f*, projecting from the inner sides of the links, between which it is placed. By this means of securing the brush in place, it may be readily removed and replaced by another when necessary.

The brushes are arranged in the articulated foundation in diagonal directions with relation to each other and the edges of the foundation, whereby the interstice between any two of the brushes is left vacant, and affords ample room for the dirt deposited on the top to fall through to the bottom of the mat or carpet, instead of accumulating among the fibers or in the upper parts of the fabric.

By this construction the mat or carpet becomes self-cleaning, and no dirt accumulates therein, but immediately falls to the bottom; and the mat may be lifted, leaving the dirt upon the floor, and replaced after removing the dirt. Should it become necessary to wash the mat or carpet, the peculiar construction thereof greatly facilitates the operation.

When a reversible mat or carpet is desired the washers may be dispensed with, except at the ends of the mat. The links are made

shorter and wider than those above described, being of elliptical or approximate form, and may be made of leather or any other suitable material. The brushes are dispensed with, and the interstices may be varied in size. This form of mat is shown in Figs. 6 and 7 as a modification of my invention. When constructed in this manner the mat or carpet is reversible, and when one side becomes worn from use the other side may be turned uppermost.

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

A self-cleaning mat or carpet, having an intersticed articulated foundation, substantially as described.

ROULLIER.

Witnesses:

DEROUAULT,
J. T. CÉVAIN.