

(No Model.)

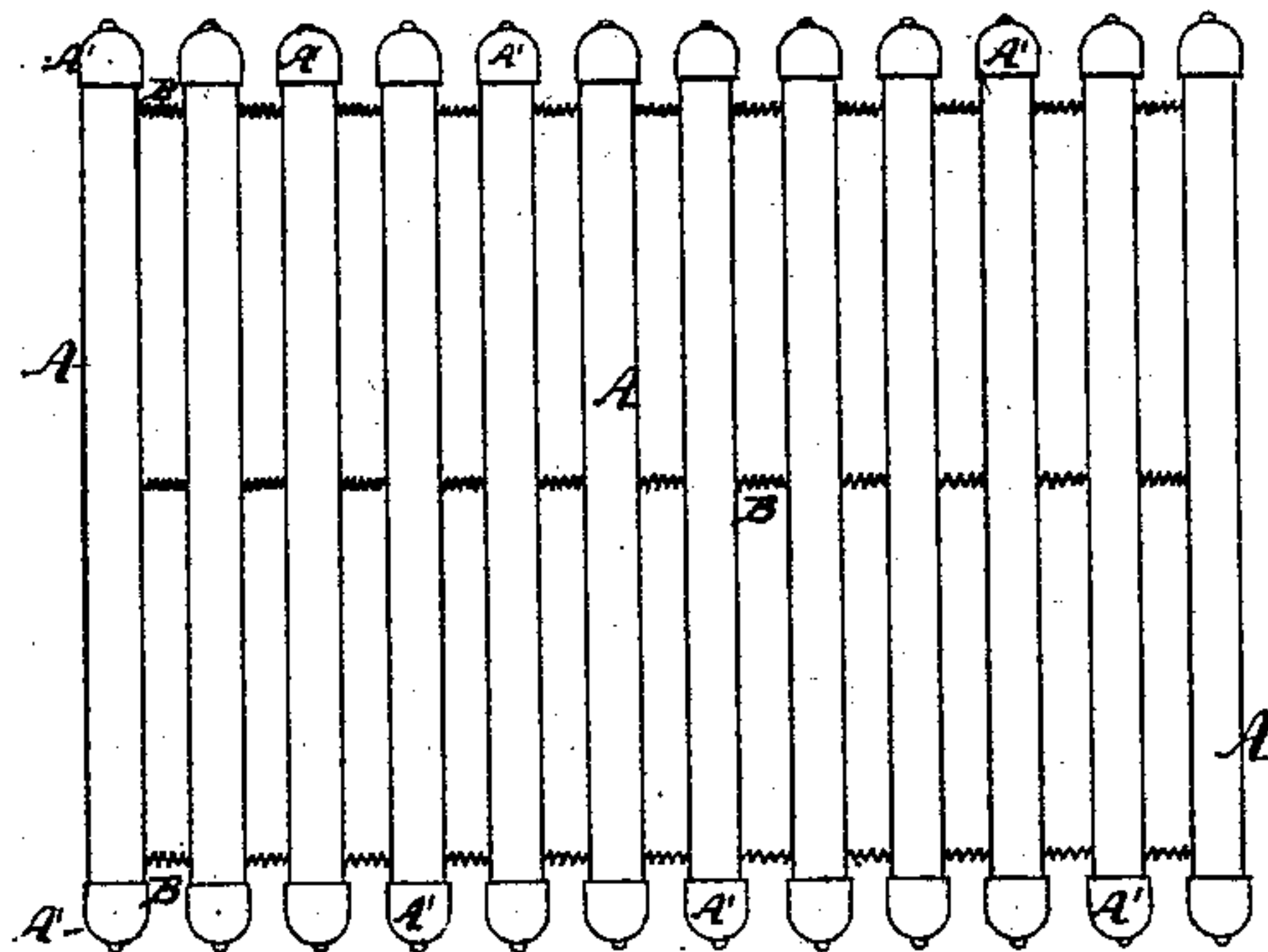
R. MARTINEZ.

MAT OR REMOVABLE FLOOR COVERING.

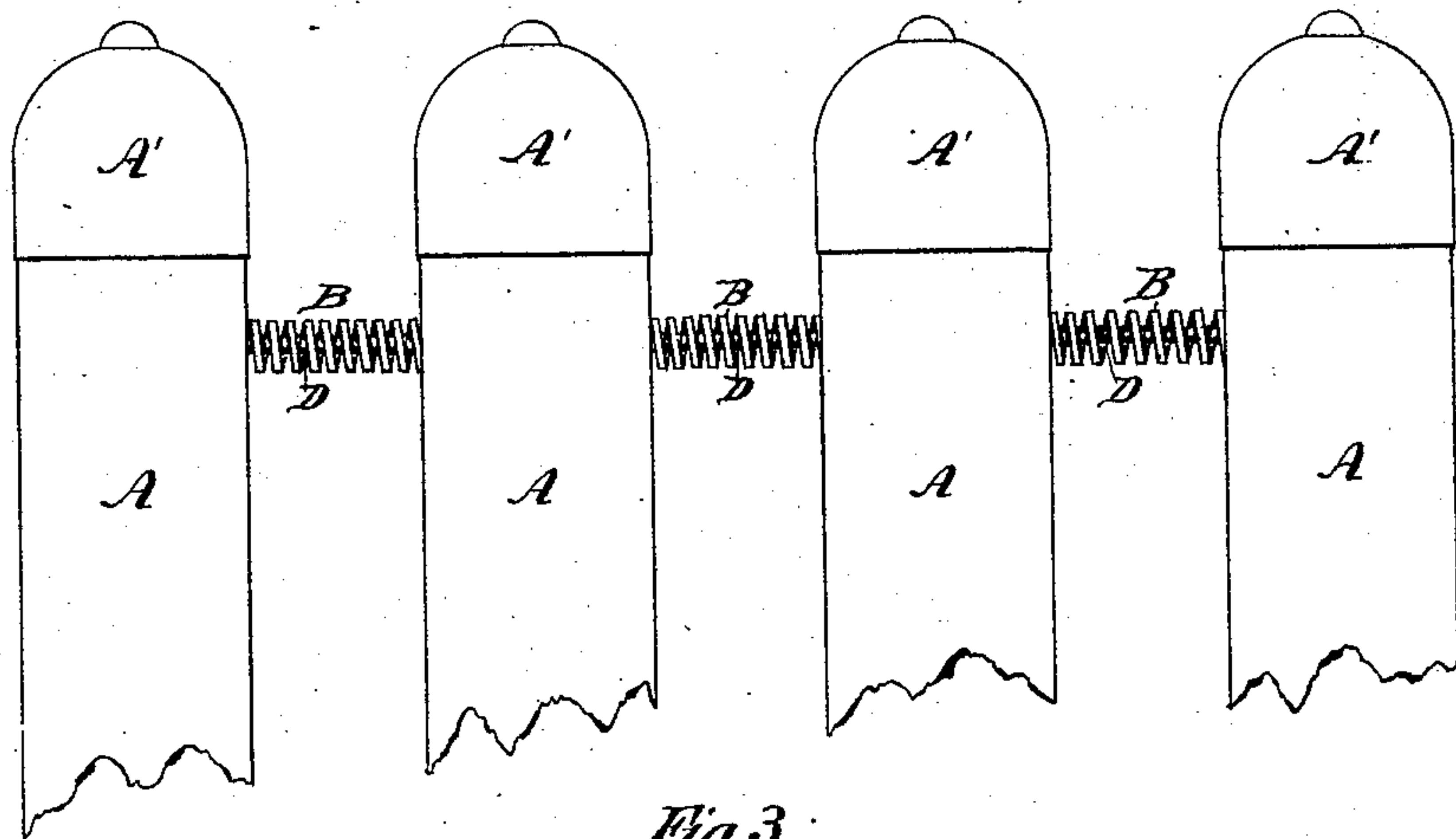
No. 281,540.

Patented July 17, 1883.

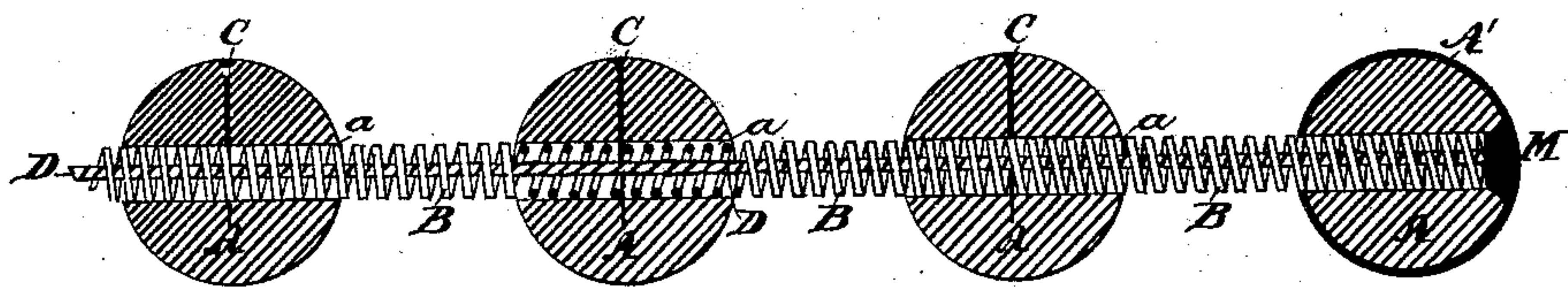
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

*B. E. Stafford.*

*Charles R. Seale.*

*Inventor:*

*Rafael Martinez*  
*His Attorney*  
*Thomas D. Stetson*



# UNITED STATES PATENT OFFICE.

RAFAEL MARTINEZ, OF NEW YORK, N. Y., ASSIGNOR TO EMIL GUTMANN  
AND HENRY GOODMAN, BOTH OF SAME PLACE.

## MAT OR REMOVABLE FLOOR-COVERING.

SPECIFICATION forming part of Letters Patent No. 281,540, dated July 17, 1883.

Application filed May 5, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, RAFAEL MARTINEZ, of New York city, in the county and State of New York, have invented certain new and  
5 useful Improvements in Mats or Removable Floor-Coverings, of which the following is a specification.

My improved mat is composed of parallel rods of wood or other cheap and durable material, secured together by flexible connections,  
10 which allow the mat to be rolled and otherwise bent in taking up and putting down, cleaning, &c. Mats of this general character have been long known and are much approved.

15 I have devised improved means of connecting the rods whereby the manufacture is facilitated. Mats constructed according to my invention possess sufficient flexibility, and are eminently attractive in appearance. They fulfill in a high degree all the requirements of  
20 matting on the floors of horse-cars, and in a great variety of other situations where liberal spaces are required to receive dust, mud, snow, &c.

25 It has long been common to make mats of this class by producing a great number of equal rods of wood, boring them transversely at two or more points, and introducing a cord of cotton, manilla, or other fibrous material, with a  
30 button or equivalent piece of wood or other material strung on the cord between each rod and the next. I dispense with the button, and employ a peculiar compound wire connection composed of a sufficiently-strong spring,  
35 composed of hard brass or steel wire, which exerts an expansive force to hold the rods properly apart. Within this I enclose a wire cord, composed, preferably, of three or more small wires of hard brass, slightly twisted together.  
40 This exerts a tensile force to prevent a too great separation of the rods. A nail or equivalent pin is driven transversely through the spiral spring at a point where it extends through a rod. This insures a reliable engagement of the spring with the rod, and causes  
45 each to maintain its place with great persistence. The mat presents a uniform and tasteful appearance.

50 The accompanying drawings form a part of this specification, and represent what I con-

sider the best means of carrying out the invention.

Figure 1 is a general plan view, showing the mat extended for use. Fig. 2 is a plan view of a portion on a larger scale. Fig. 3 is a  
55 cross-section.

Similar letters of reference indicate corresponding parts in all the figures.

A A are rods or cylindrical sticks of wood. They may be pine. Each is bored transversely  
60 at *a a a*. Through each hole *a* is inserted a spiral wire, B.

C are brads or other small nails driven through the wood of A transversely to the spiral wire B. Each opens a space between  
65 two spans, and stands therein, firmly maintaining its position in the coils, and, except by the slight yielding of the coils elastically, it maintains each rod A at a uniform distance from its neighbors on each side. 70

D is a wire cord composed of three or other number of fine wires extending through the spiral B, and serving to hold the outermost of the rods A reliably together. The rods A on each edge of the mat should be partly or  
75 wholly of metal. The spiral wires B, and the wire cord D are both strongly attached at each end to the corresponding rod. I have represented the attachment as being effected by  
80 soldering; but this may be varied. The solder is marked M. The ends of the several rods A are tipped with thin metal caps A'. They form a handsome finish, and prevent the material from being abraded, split, or otherwise  
85 injured at the ends.

When my mat is exposed to use, the several rods A are held together by the wire cords D, and are maintained at a uniform distance apart by the elastic force of the coiled springs B. I prefer that these springs shall be so produced  
90 that the metal of each coil shall be nearly in contact with the metal of the adjacent coils, there being only sufficient slack to allow the requisite flexibility. The elastic force of the spiral wires B should not be great, but it should  
95 be exerted always in the direction to urge the rods A apart.

Modifications may be made in the forms and proportions of the details. I can mount the rods A wider apart, thus exposing a greater 100



length of the spiral wires B between each rod A and its adjacent corresponding rod, or I can mount the rods A nearer together, thus exposing less of the spiral wires B; but it is  
5 important to insure sufficient flexibility to allow the mat to be easily rolled up.

When my mat is worn on one side, it can be turned over and used again; or the use of it may be alternately first one side up and then  
10 the other, so that the wear is commenced and proceeds on both faces about equally.

The invention may be worked with some success with a single wire of steel or hard brass to serve the functions of the flexible cord D.  
15 I have, in my experiments, used successfully what is known as "office-wire"—such as is used in telegraphing and telephoning—being composed of one copper wire, with a covering of braided cotton yarns, saturated with par-  
20 affine, or some analogous material. I believe it may be used without any such tie D; but I prefer a tie composed of a number of fine wires, so as to give great flexibility.

I claim as my invention—

1. The improved mat described, composed 25 of the parallel bars A, spiral wires B, and transverse nails or pins C, combined and arranged for joint operation, as herein specified.

2. The combination of the parallel bars A, spiral wires B, and tensile cords D, arranged 30 to serve as herein specified.

3. A mat composed of parallel rods A, having transverse holes *a*, spiral wires B, flexible connections D, and fastenings M, combined and arranged to serve as herein specified. 35

In testimony whereof I have hereunto set my hand, at New York city, this 30th day of April, 1883, in the presence of two subscribing witnesses.

R. MARTINEZ.

Witnesses:

EMIL GUTMANN,  
HENRY GOODMAN.