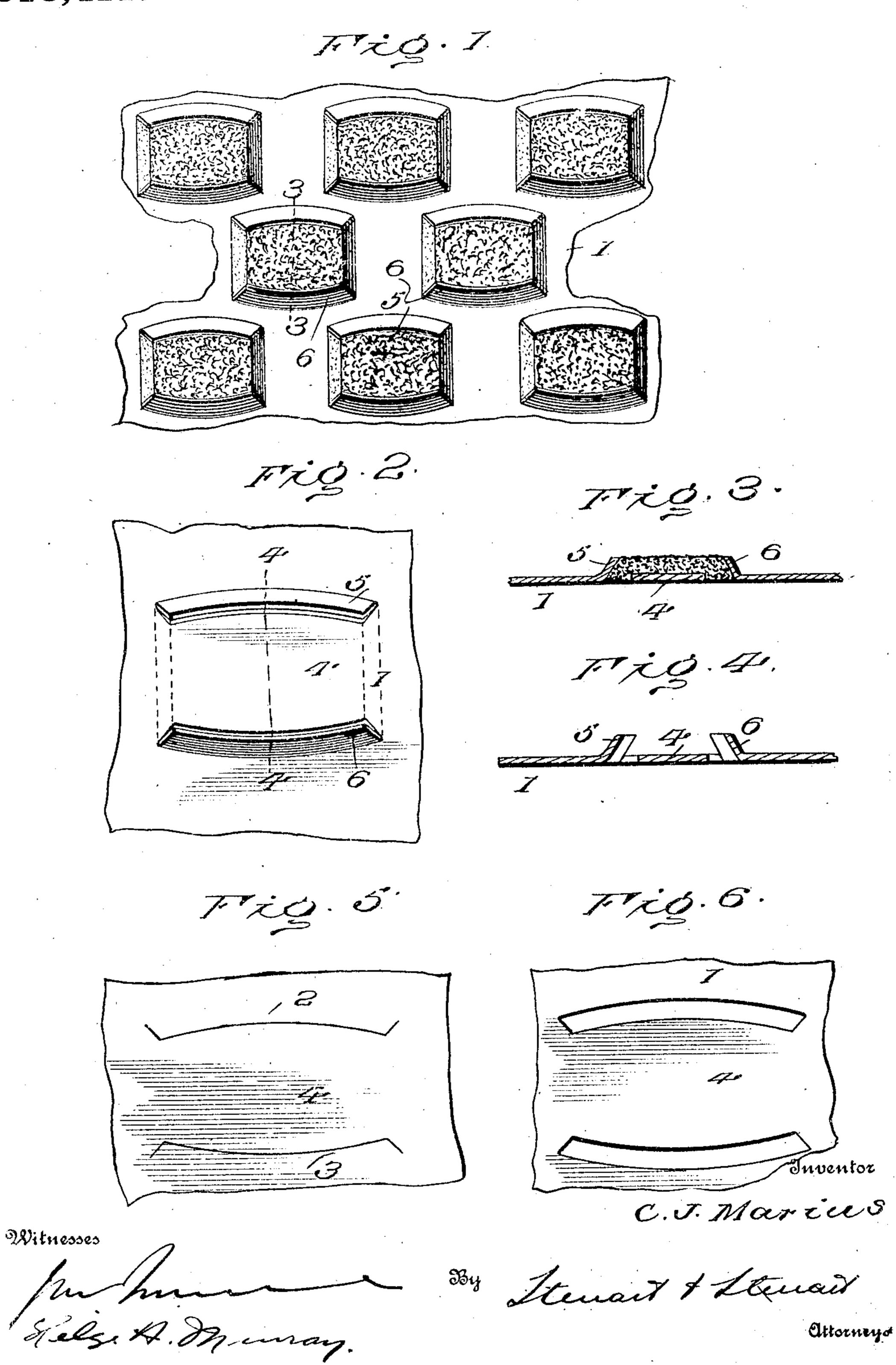
C. J. MARIUS. ANTISLIPPING DEVICE. APPLICATION FILED NOV. 9, 1908.

913,411.

Patented Feb. 23, 1909.



UNITED STATES PATENT OFFICE.

CASTERAN J. MARIUS, OF WEST HOBOKEN, NEW JERSEY.

ANTISLIPPING DEVICE.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed November 9, 1906. Serial No. 342,718.

To all whom it may concern:

Be it known that I, Casteran J. Marius, a citizen of the United States of America, and resident of West Hoboken, in the county 5 of Hudson, State of New Jersey, have invented certain new and useful Improvements in Antislipping Devices, of which the following is a specification.

My invention has for its object the produc-10 tion of an anti-slipping device having a base plate, preferably of sheet metal, so designed as to provide a firm and sufficient support for the anti-slipping pads, while at the same time securing the latter against lateral dis-

15 placement. Anti-slipping devices having sheet metal base plates are not new with this invention, but in all devices of this character with which I am acquainted, the plates hereto-20 fore in use have either failed to provide a simple and sufficient means for supporting the pads against the pressure of traffic, or have not reliably held them against lateral

displacement and loss.

25 I accomplish the object of my present invention by slitting or cutting the base plate at two or more points so removed from each other as to provide an intervening strip of the plate of sufficient strength to serve as the 30 support for the pad against any ordinary pressure, and stamping or turning the metal up at the slits. The pad being placed on the intervening strip, between the slits, the turned up portions of the plate are then 35 pressed against the pad to prevent lateral displacement of the latter. In order to preclude the possibility of displacement I prefer to make the slits of a curved or irregular design, concaved with respect to each other, 40 whereby upon formation of the turned up portions or wings a partially closed area or pocket is produced which acts to retain the pad against displacement in any direction. I may vary this construction to accomplish 45 the same result by forming the pads to fit into the slits made in the plate and folding or stamping the wings over the edges of the pad as described.

Having set forth the objects and nature of 50 my invention, I will now describe the same in detail, having reference to the accompany-

ing drawings, in which-

Figure 1 is a plan view of my device showing the anti-slipping pads mounted in a 55 plate. Fig. 2 is a similar view of the device before the pads are inserted therein. Fig. 3 is

a detail view in cross-sectional elevation on the line 3-3 of Fig. 1. Fig. 4 is a view in crosssectional elevation along the line 4—4 of Fig. 2. Fig. 5 is a detail plan view of the bottom 60 of the bed plate, showing the lines on which the same is cut, but showing the retaining wings as yet unformed. Fig. 6 is a view similar to Fig. 5, the retaining wings having been pressed upward to receive the pad.

Referring to the drawings, and particularly to Fig. 5, the base plate (1) is shown as cut or slitted along lines 2 and 3. These lines are oppositely disposed and somewhat removed from each other to provide an in- 70 tervening strip (4) which extends between the wings (5) and (6) when the metal is folded or turned up at the slits, as shown in Fig. 6. The cuts, or slits, (2 and 3) are shown in the drawings as curved or con- 75 caved toward each other, whereby, upon formation of the wings (5 and 6), a partial inclosure or pocket between the wings is produced.

In practice the wings formed at the slits 80 are forced upwardly, to 90° or more, so that the anti-slipping pads may be set into the pockets. The pads being in place, the wings are then turned inward, as by means of a stamp or die, to engage the pads firmly. 85 If, however, the pad is of a flexible mate ial, such as rubber, or is introduced into the pocket in a molten condition, it is not absolutely necessary to turn the wings into an initial position other than the position 90 they finally assume.

The strip (6), between the wings, serves as a base or support for the pads; and as stated above, the latter are prevented from lateral displacement by the curvature of 95 the wings. In the drawings I have shown the wings as of a simple curve. Any other curve or irregular form of cut, however, provided it tends to inclose the pad and retain it in place, will answer the purpose.

Although I have shown and described my retaining wings as formed by turning the metal at each slit upward and away from the other slit, it is obvious that the wings may be formed by turning the metal at each 105 slit upward and toward the other slit. In the latter instance the intervening supporting strip (6) would have greater width and strength, but on the other hand undesirable holes would be formed in the plate outside 110 of the wings.

In Fig. 1 my preferred arrangement of

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anti-slipping pads and retaining devices is shown. These are arranged in rows, staggered with respect to each other. In the present instance the curved style of wings 5 shown permits of the pads fitting closely to each other, whereby a large area of antislipping surface is possible and an attractive appearance secured.

Whereas my invention as described is 10 useful in connection with any character of anti-slipping pad, yet I consider it particularly useful in connection with an antislipping pad of the character set forth in my co-pending application filed Nov. 27, 1905,

15 No. 289,301.

The anti-slipping material of my aforesaid application, which is composed of particles of carborundum or other gritty material united by metal, is of a nature to 20 form, in coöperation with the supporting strip and retaining wings, an anti-slipping device of great durability and efficiency.

Having described an embodiment of my invention in detail, what I claim and desire

25 to secure by Letters Patent is:—

1. In an anti-slipping device, a sheet metal bed plate having wings turned upward from the surface of the plate intermediate the edges thereof, and a strip of the plate 30 intermediate the wings, whereby a pocket with a supporting base for anti-slipping material is formed.

2. An anti-slipping device comprising a sheet metal bed plate having wings turned

upward from the surface of the plate inter- 35 mediate the edges thereof, a strip of the plate intermediate the wings and antislipping material held between the wings on the intermediate strip.

3. In an anti-slipping device a sheet 10 metal bed plate having retaining wings projecting upward from its surface intermediate its edges and a supporting strip between the

wings.

4. In an anti-slipping device a sheet 45 metal bed plate having wings turned upward from the surface of the plate intermediate its edges and a supporting strip between the wings, the wings being concaved with respect to each other, whereby 50 a pocket with a supporting base for antislipping material is formed.

5. An anti-slipping device comprising a sheet metal bed plate, having wings turned upward from the surface of the plate inter- 55 mediate the edge thereof, a strip of the plate intermediate the wings, and an antifriction material composed of particles of grit united by a metal in the pocket on the strip between the wings.

Signed by me at New York city, county and State of New York, this 26th day of

October, 1906.

CASTERAN J. MARIUS.

Witnesses:

WENDELL P. BARKER, EMMA W. FINLAYSON.