

No. 729,923.

PATENTED JUNE 2, 1903.

W. J. ELLIS.
RUBBER MAT.

APPLICATION FILED MAR. 6, 1903.

NO MODEL.

FIG. 1.

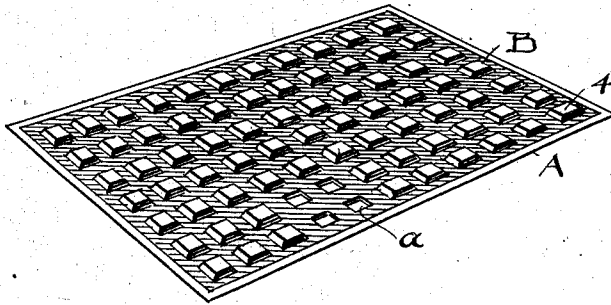


FIG. 2.

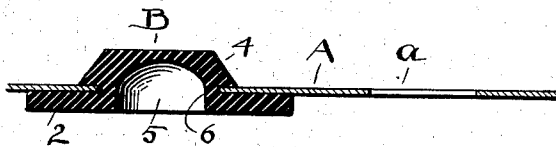
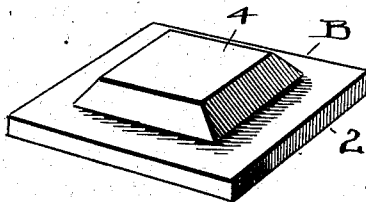


FIG. 3.



ATTEST.

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UNITED STATES PATENT OFFICE.

WILLIAM J. ELLIS, OF AKRON, OHIO.

RUBBER MAT.

SPECIFICATION forming part of Letters Patent No. 729,923, dated June 2, 1903.

Application filed March 6, 1903. Serial No. 146,566. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. ELLIS, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented new and useful Improvements in Rubber Mats; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to rubber mats for steps, stairs, floors, and other possible uses; and the invention comprises a mat or matting provided with separate and removable studs, blocks, or parts set or mounted in a preferably sheet-metal base or support, all substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a mat made in accordance with my invention. Fig. 2 is a cross-section of a portion of the base and of one of the studs or blocks therein. Fig. 3 is a perspective view of one of the studs or blocks alone.

As thus shown, A represents a base or supporting part, which is preferably of sheet metal and which may be of galvanized iron or other metal prepared or finished in a suitable way and in which are formed a series of holes or openings *a* by punching, stamping, or otherwise and of any desired shape, such as square, round, diamond shape, or the like. They are square in this instance. Into these holes I set the rubber studs or blocks B. These are of somewhat peculiar formation, which especially adapts them to my use, and are shown as having a broad bottom portion 2, flat on both sides, which comes wholly beneath plate A and constitutes the rest or bottom of the mat or matting, and a top portion consisting of a head 4, which comes wholly above plate A and in the style here shown has a flat rectangular top surface and beveled sides. The area of the head as compared with bottom or base 2 of the stud may be varied; but the present construction represents

a good proportion and is satisfactory in use. Head 4 is further distinguished by having a cavity 5, open from beneath through bottom 2 and which contributes to its cushioning or elastic effect; but this cavity may be omitted. A neck 6 is shown as extending about the said cavity next above bottom 2 and which connects the head with said bottom, and in a sense there is a slot about said neck separating head and bottom and making room for plate A. This construction enables me to collapse or compress the head more or less to button or insert it through opening *a* in sheet A and in like manner to remove said studs when necessary. The said studs are made and sold as an article of manufacture apart from the mat, because they are designed to be replaced when they become worn. This is especially desirable when the mat is used on stairs or steps, in which case the wear comes mostly at the middle of the mat, and the middle portion thereof will be worn down when the ends are comparatively good. In such cases I remove the worn studs and replace them with new ones, and for this reason they are kept in stock by dealers. They may be of any desired color and also be set into the plate in any preferred design to get the most pleasing effects, and I may use such colors in working out any pattern or design for which the mat may be fashioned.

The sheet-metal support or connecting member A may, if preferred, be perforated between the holes or openings *a*, and the invention may be embodied in a mat, as shown, or as matting serving for an entire floor-covering, and, in fact, it may be used for any purpose for which it may be found useful here or there in one form or another, and the edges of the mat may be finished in any desirable way.

What I claim is—

1. A mat comprising a suitable sheet-support having a series of openings, and a corresponding series of studs engaged through said openings, said studs having flat bottoms on one side of the mat and heads on the other

side partly overlapping the sheets about said openings, and cavities in the bodies of the studs open from below, substantially as described.

- 5 2. A rubberstud for floor-mats and the like having a flat bottom and a head separated therefrom by a slot beneath the outer portion of said head, and the said head having a cav-

ity open from beneath, substantially as described.

Witness my hand to the foregoing specification this 24th day of February, 1903.

WILLIAM J. ELLIS.

Witnesses:

JEFF LEESER,
FOREST FIRESTONE.