

No. 794,304.

PATENTED JULY 11, 1905.

J. D. KARNAGHAN & J. H. PRESCOTT.

FLEXIBLE METAL DOOR MAT.

APPLICATION FILED JAN. 5, 1901.

2 SHEETS—SHEET 1.

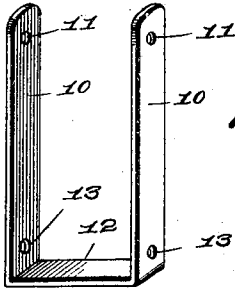


Fig. 1.

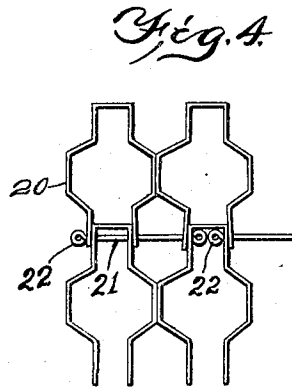


Fig. 4.

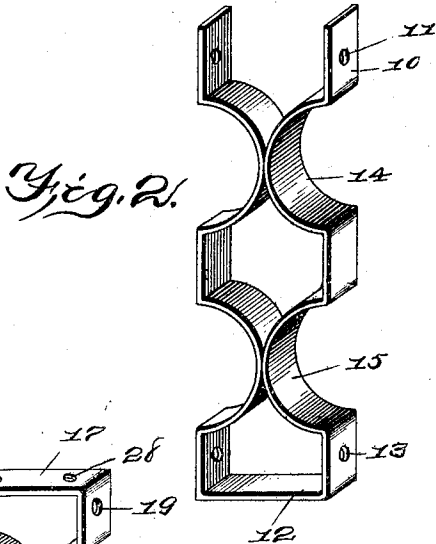


Fig. 2.

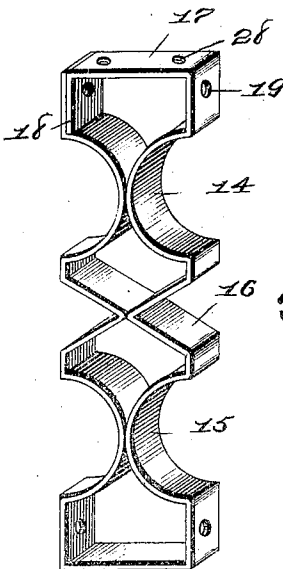


Fig. 3.

Witnesses:
R. S. Onwig.
F. C. Stuart

Inventors
J. D. Karnaghan and
J. H. Prescott.
by J. Ralph Onwig, Atty.

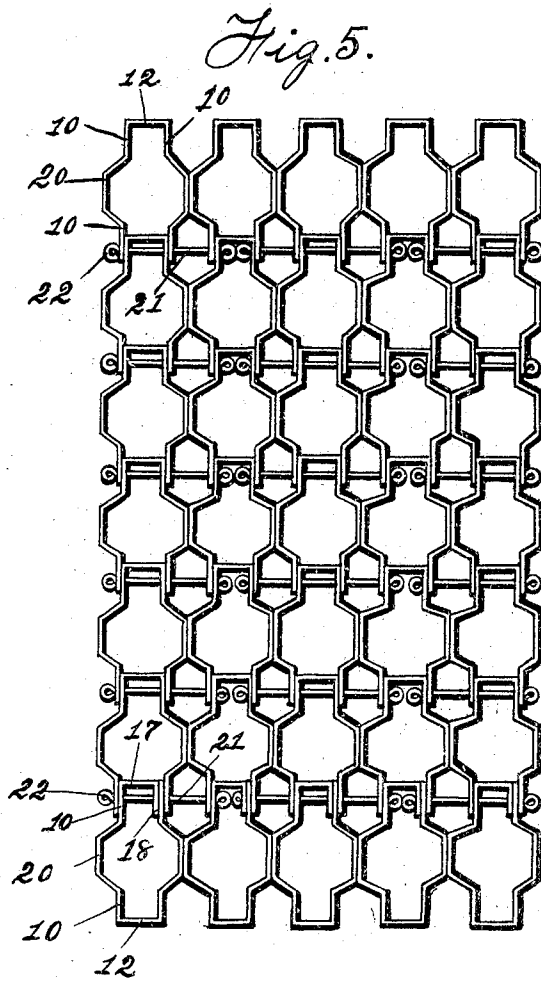
No. 794,304.

PATENTED JULY 11, 1905.

J. D. KARNAGHAN & J. H. PRESCOTT,
FLEXIBLE METAL DOOR MAT.

APPLICATION FILED JAN. 5, 1901.

2 SHEETS—SHEET 2.



Witnesses:
L. H. Orrig.
S. F. Christy

by

Inventors J. D. Karnaghan &
J. H. Prescott.
J. Ralph Orrig Atty

UNITED STATES PATENT OFFICE.

JOHN D. KARNAGHAN AND JOHN H. PRESCOTT, OF MARSHALLTOWN,
IOWA.

FLEXIBLE METAL DOOR-MAT.

SPECIFICATION forming part of Letters Patent No. 794,304, dated July 11, 1905.

Application filed January 5, 1901. Serial No. 42,132.

To all whom it may concern:

Be it known that we, JOHN D. KARNAGHAN and JOHN H. PRESCOTT, citizens of the United States, residing at Marshalltown, in the county of Marshall and State of Iowa, have invented certain new and useful Improvements in Flexible Metal Door-Mats, of which the following is a specification.

The objects of our invention are to provide a flexible door-mat composed of a series of links, each link being made from a piece of flat metal formed into a figure substantially rectangular in outline and having one end closed and the other open, whereby one link may have its closed end inserted into the opening of an adjacent link and pivoted therein in any ordinary way, so that when a number of links are assembled to form a mat they will mutually brace against such strains as might tend to change the outline of the mat—that is to say, a mat will be provided that will always retain its original outline—and at the same time each transverse series of links is pivoted to the adjacent transverse series in such manner that one may be folded over the other as required to provide a mat that may be folded into comparatively small space for convenience in transportation, storage, &c.

A further object is to provide a mat in which the side-by-side links may be connected by rivets or rods or other fastening means that do not extend through the entire width of the mat, thereby providing a mat that is slightly flexible laterally, it being remembered in this connection that in mats requiring transverse rods running entirely through the mats said rods frequently become bent, and thereby cause parts of the mat to stand above the floor-surface, which feature is obviously highly objectionable. By our improved construction a mat is provided which will at all times lie perfectly flat upon the floor.

A further object is to provide a mat of this class in which both ends will present straight flat surfaces, thereby avoiding the necessity of providing finishing-strips or the like for said ends.

A further object is to provide simple, durable, and inexpensive means for finishing the

sides of the mat, which finishing means will not in any way interfere with the flexibility of the mat and which will present an ornamental appearance.

Our invention consists in certain details in the construction, arrangement, and combination of the various parts of the mat whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in our claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows an enlarged detail perspective view of the simplest form of link used in constructing our improved mat. Fig. 2 shows a like view of a modified form of same. Fig. 3 shows a like view of one of the links designed for finishing the end of the mat. Fig. 4 shows a top or plan view of a section of a mat constructed from links of modified form. Fig. 5 shows a plan view of a complete mat embodying our improvements.

Referring to the accompanying drawings, it will be noted that each link is made from a single strip of flat metal having its side portions 10 parallel with each other, separated by a considerable distance, and provided with perforations 11. The end portion of the link 12 is straight and at right angles to the sides and forms a closed end for the link. The sides 10 are provided near the end 12 with the perforations 13.

In the modification shown in Fig. 2 the sides of the link are curved inwardly at 14 and 15 to vary the appearance of the link and to aid in making a more artistic mat. The essential features, however, which are the parallel sides separated from each other and provided with holes 11, the straight end 12, and the holes 13 in the sides near the straight end, are the same in both forms.

In the modification shown in Fig. 3 the same description as applied to the form shown in Fig. 2 covers the construction shown in Fig. 3 in regard to the features above noted, and in addition the sides of the link are bent inwardly to form a substantially V-shaped figure at 16. Furthermore, in the modification shown in Fig. 3 we have illustrated our preferred means for providing a finishing end for

a mat, which means consist in extending one of the sides in a plane at right angles to a point adjacent to the opposite side, thereby forming a closed end 17, and then parallel with said end 5 at 18, and providing an opening 19 in the part 18 to coincide with the opening 11. This obviously may be done at a very slight expense.

In the modification shown in Fig. 4 the sides of the link are bent outwardly at 20 instead of inwardly, as shown in the modifications of 10 Figs. 2 and 3. In other respects the modification shown in Fig. 4 contains the essential features of the form shown in Fig. 1.

In forming a mat from a series of links of 15 the kind shown in any one of the modifications we first place the links in rows side by side, with the ends 12 all at the same end of the mat. Then the closed ends of another row of links are placed between the open ends of the 20 first row, and so on indefinitely. The links for the opposite end of the mat are provided with the closed ends 17, and obviously when this form of link (shown in Fig. 3) is used either the closed end 17 or the closed ends 12 may 25 be used as the finishing end of the mat. For connecting the links with each other we use a series of short rods 21, extending from a point between the sides of one link to a point 30 in alinement transversely of the mat. Said rods have looped heads 22 at their ends to prevent them from pulling through the openings in the links. The heads at the outer side boundaries of the mat are on the outside of 35 the links.

Having thus described our invention, what we claim, and desire to secure by Letters Patent of the United States therefor, is—

1. An improved metal door-mat, compris-

ing a number of links each made of a single 40 piece of sheet metal having one end open and the other end closed, said links being arranged in rows both longitudinally and transversely of the mat, the closed ends of the links of one 45 transverse row inserted in the open ends of those of the adjacent transverse row, means for pivotally connecting the engaging links and for connecting the side-by-side links with 50 each other, and means for finishing one end of the mat, said means comprising a row of metal links closed at each end, one end of each link inserted in the open end of a link of one of the transverse rows at one end of the mat and pivotally connected therewith.

2. An improved metal door-mat, compris- 55 ing a number of links each composed of separated sides and an end, said links arranged in rows transversely, and in rows longitudinally of the mat, the closed end of each of the 60 links in one transverse row inserted in the open end of a link in the adjacent transverse row, and rods for uniting the links, extending transversely of the mat passed through the 65 adjacent ends of the links and having an end within the closed end of a link.

3. In a flexible floor-mat, a single piece of 65 flat metal of uniform width bent into oblong rectangular shape and its ends placed in overlying contacting position at one corner and provided with coinciding perforations in the 70 end portions of its parallel sides for the passage of a wire, in the manner set forth, for the purposes stated.

JOHN D. KARNAGHAN.
JOHN H. PRESCOTT.

Witnesses:

W. B. ELLIOTT,
P. J. McCAVICK.