No. 837,474. PATENTED DEC. 4, 1906.

W. O. & F. H. JEWELL.

DOOR SILL FOR RAILWAY CARS.

APPLICATION FILED JAN. 5, 1906.

Fig. 1.

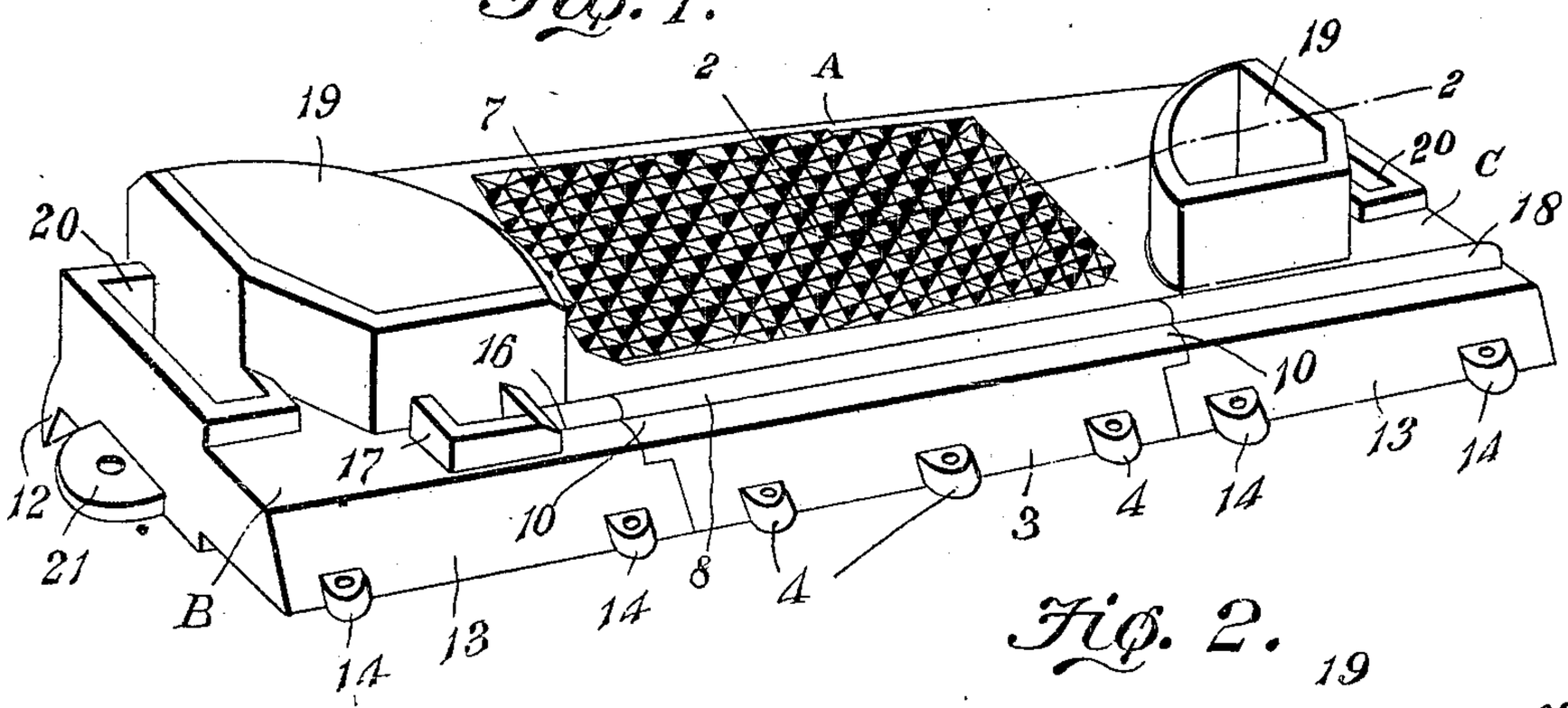

Fig. 2.

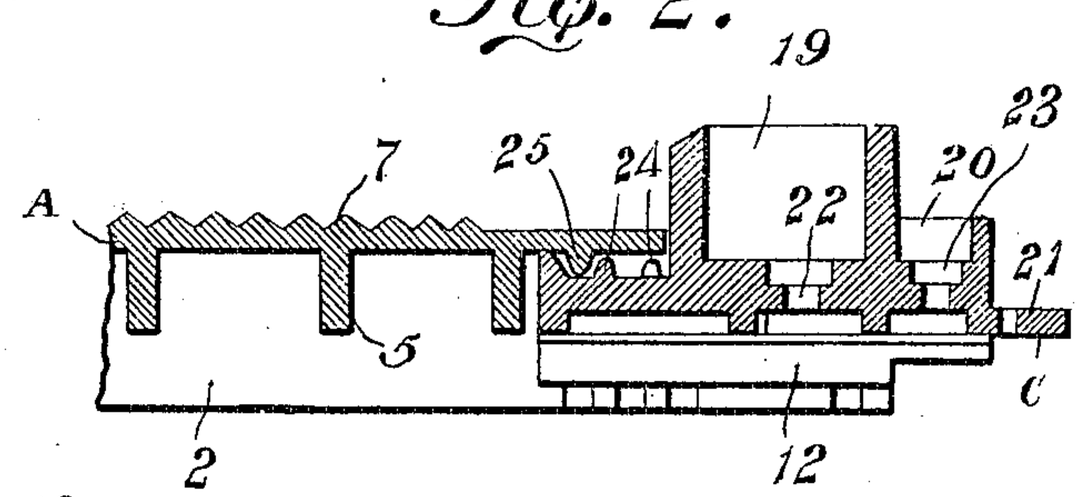

Fig. 3.

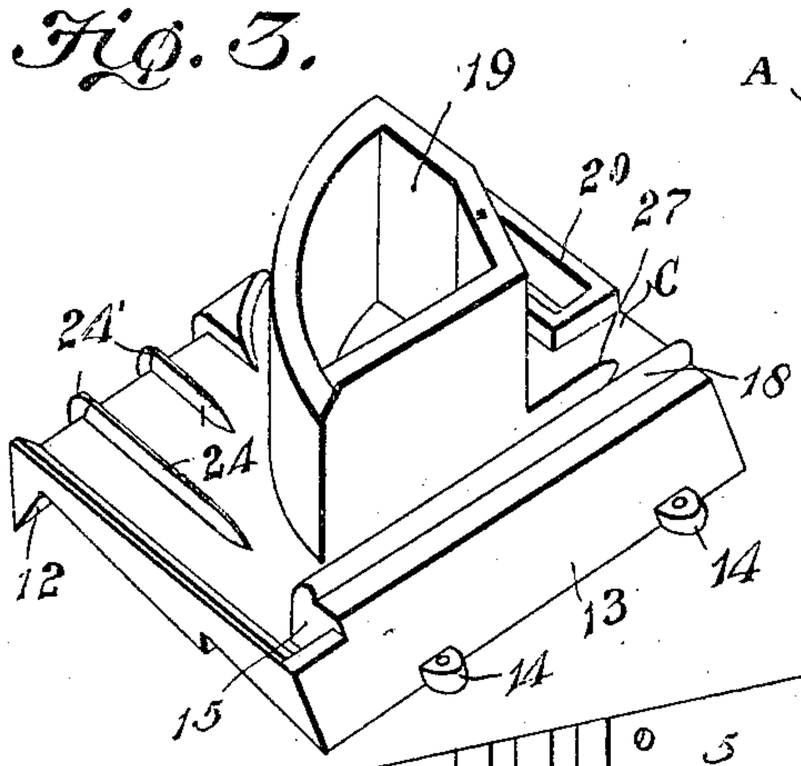

Fig. 4.

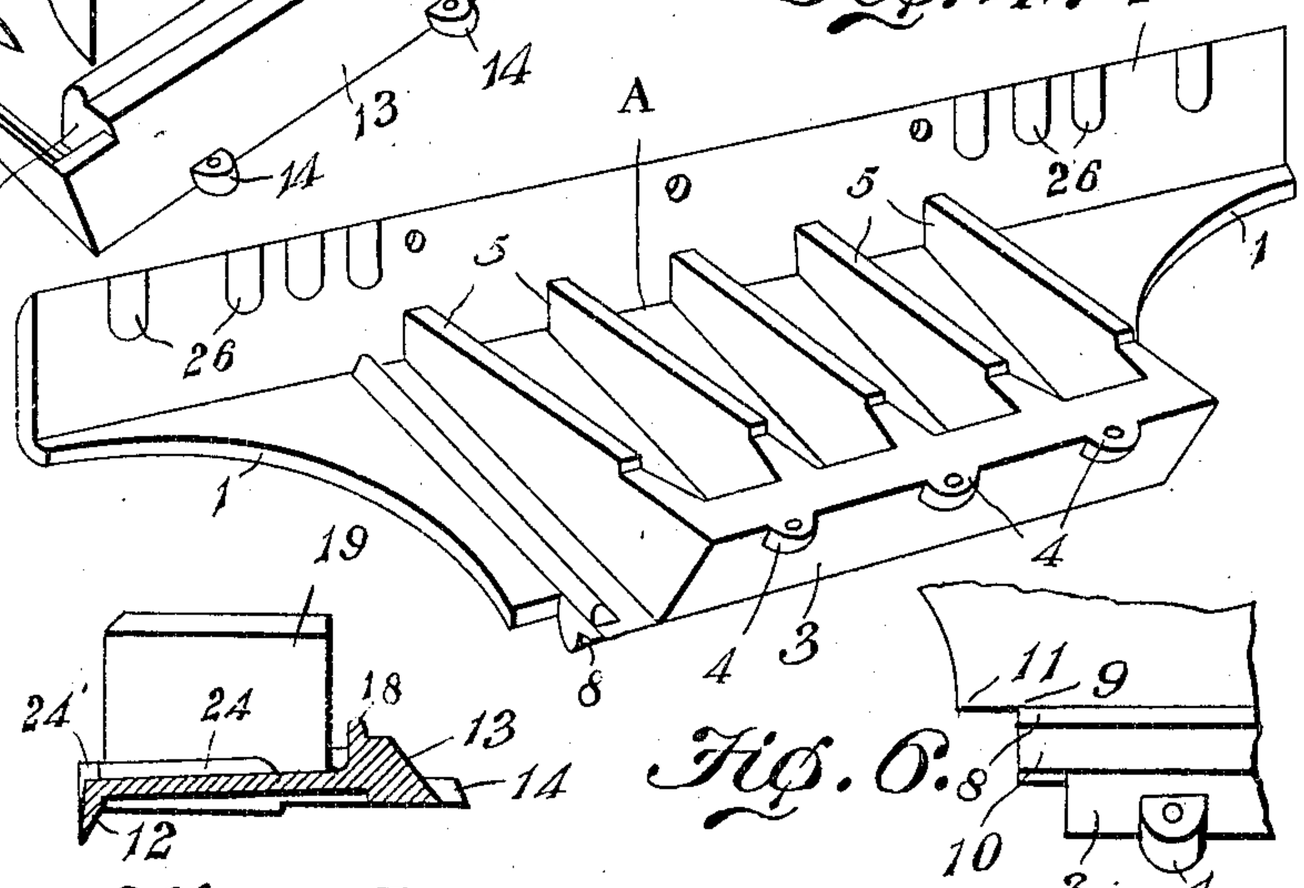

Fig. 6.

Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM O. JEWELL AND FRANK H. JEWELL, OF MARION, INDIANA.

DOOR-SILL FOR RAILWAY-CARS.

No. 837,474. Specification of Letters Patent. Patented Dec. 4, 1906.

Application filed January 5, 1906. Serial No. 294,760.

To all whom it may concern:

Be it known that we, WILLIAM O. JEWELL and FRANK H. JEWELL, citizens of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented a new and useful Door-Sill for Railway-Cars, of which the following is a specification.

This invention relates to door-sills for railway passenger-cars, and is in the nature of a cap or shield for protecting the usual wooden door-sill.

It is an important object of the invention to form the device in separable sections, whereby the intermediate or tread section may be replaced when worn or broken without disturbing the other sections.

Another object of the invention is to provide for effectually draining the sill in a very simple and satisfactory manner.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a door-sill embodying the features of the present invention. Fig. 2 is a cross-sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of one of the end sections. Fig. 4 is a detail perspective view of the middle or tread section inverted. Fig. 5 is a detail sectional view taken through one of the end sections at the inner side of its post-socket. Fig. 6 is a fragmentary plan view of one rear corner of the tread-section.

Similar characters of reference designate corresponding parts in each and every figure of the drawings.

As hereinbefore indicated, the present device is made up of separable sections, preferably three in number, and designated in general A, B, and C.

The section A is the middle or tread section and consists of a flat cast plate having arcuate seats or recesses 1 formed in its inner corners and provided throughout its outer edge with a depending flange 2, which is disposed at substantially right angles to the body of the section. Across the inner shorter edge of the member A is a relatively thick depending flange 3, which inclines downwardly and away from the section and is provided at its lower outer edge with a series of perforate ears 4 to receive fastenings for securing the member to the floor of a car. Between the flanges 2 and 3 are spaced integral ribs 5, which stiffen the member and lie upon the wooden sill, so as to space the body of the section above the sill. The central upper portion of the body of the section A is roughened, as at 7, by means of a plurality of upstanding projections, so as to prevent slipping of the feet upon the sill and to give the latter the desired thickness to withstand wear without likewise thickening the remaining portions of the member. Between the roughened portion 7 and the flange 3 there is an upstanding rib 8, parallel with the inner and outer edges of the member and designed to form a track for use in conjunction with a sliding door. The flange 3 terminates short of each end of the inner edge of the member A, and each inner corner of the member is provided with a rectangular notch 9, so as to produce progressively-increasing flanges 10 and 11.

The end sections B and C are substantial duplicates, and therefore a description of one of them will be sufficient. Each end section consists of a flat casting, provided at its outer edge with a longitudinal depending flange 12, which is overlapped upon its outer side by the flange 2 of the tread-section A when the sections are assembled. The inner edge of the end section is provided with a depending flange 13, corresponding to and forming a continuation of the beveled or inclined flange 3 of the tread-section and provided with perforate ears 14 for the reception of fastenings to secure the section to the wooden sill. The top portion of the inner edge of the member is cut away, as at 15, at its inner end, so as to receive and be overlapped by the flange portion 10 of the tread-section. A continuation of the track or rib 8 is provided at 16 upon the end section B, said continuation being comparatively short and abutting against an open-topped socket 17, rising from the member. The other end member C is provided with a rib 18, extending for the entire length of the member and forming a continuation of the track 8. The socket 17 is designed to receive a cushion of rubber or the like to form a stop for a sliding door mounted upon the track 8. At about the center of each end section there is an upstanding socket 19, the walls of which rise to a suitable height above the sill and are shaped to conform to the configuration of the usual corner-posts or door-posts. Between the socket 19 and the adjacent end of the end

member there is another socket 20 for the reception of another post, said socket extending rearwardly from the front edge of the member. Projecting outwardly from the outer end of each end section is a perforate ear 21, flush with the under side thereof for the reception of a fastening to secure the end section in place. Additional fastenings are accommodated by means of flanged openings 22 and 23, formed centrally through the sockets 19 and 20, whereby the end section may be firmly secured in place. That portion of each end section which is overlapped by the tread-section A is guttered from front to rear, preferably by the provision of upstanding ribs 24, and the under side of said overlapping portion is provided with a depending rib 25 to lie against the terminal rib 24 of the end section, so as to prevent lateral separation of these elements. The purpose of the concaved seats or recesses 1 is to receive the convexed outer faces of the post-sockets 19, and thereby produce a snug fit between the tread-section and the end sections.

By reference to Fig. 2 of the drawings it will be noted that the ribs 24 space the overlapping end portion of the section 1 above the end section, so as to receive rain-water and the like, which drains through the joints between the tread-section and the end sections. Provision is made for carrying this water off by having the ribbed upper face of the end section inclined downwardly and forwardly, as best indicated in Fig. 5 of the drawings, the ribs 24 being projected beyond the end sections and continued downwardly upon the front of the flange 12, as at 24′, so as to provide channels between the flanges 12 and 13, through which the water may drain off. By preference the inner side of the flange 2, as best shown in Fig. 4, is provided with upright grooves or notches 26, located between the ribs 24′, so as to produce relatively large drain-passages between the flanges 12 and 13.

It will of course be understood that only one of the end sections is provided with a pocket 17 for the reception of a rubber or other buffer, while the other section—for instance, the one designated C—is provided with a drain-channel or gutter 27, formed in its upper face between the rib 18 and the socket 19 and inclined toward the tread-section A, so as to effectually drain water beneath said tread-section.

Having thus described the invention, what is claimed is—

1. A metallic sill for cars comprising separate end sections, and an intermediate tread-section overlapping the end sections, the overlapped upper face of each end section being inclined forwardly to form a water-shed and ribbed to space the tread-section from the upper face of the end section, the forward edges of the sections having dependent flanges, and the flange of the end section having spacing-ribs engaging the flange of the tread-section.

2. A metallic sill for cars comprising separate tread and end sections, each end section having an upstanding post-socket and overlapped by the adjacent end of the tread-section, each end of the tread-section being shaped to fit against the adjacent post-socket, the overlapped portion of each end section being inclined downwardly and forwardly and provided with ribs spacing the sections, the under side of the tread-section having ribs fitting between ribs of the end sections to prevent endwise play of the tread-section, the three sections having front depending flanges with the flanges of the end sections in rear of the flange of the tread-section, the ribs of the end sections being extended across the flanges of said section and engaging the flange of the tread-section to space the flanges.

3. A metallic sill for cars comprising separate end sections, and an intermediate section, the end sections having upstanding post-sockets and the tread-section having its ends shaped to fit the post-sockets and to overlap the end sections, the tread-section being provided with front and rear depending flanges and transverse ribs upon the under side thereof, the upper face portions of the end sections which are overlapped by the tread-section being inclined forwardly to form a water-shed, and the lapped portions of the tread and the end sections having interengaged ribs to space the sections and interlock them against endwise separation.

4. A metallic sill for cars comprising separate end sections, and an intermediate section, the end sections having post-engaging portions, and the intermediate section having its ends shaped to fit said post-engaging portions, and to overlap the end sections, the tread-section having front and rear depending flanges, and ribs upon its under side, the upper face portions of the end sections which are overlapped by the intermediate section being inclined to form a water-shed.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

WILLIAM O. JEWELL.
FRANK H. JEWELL.

Witnesses as to the signature of William O. Jewell:

GILBERT R. JEWELL,
ROY R. BORUFF.

Witnesses as to the signature of Frank H. Jewell:

DAVID WEESNER,
OLINIS S. DAVIS.