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CURBING FOR RAILROAD TRACKS RUNNING ALONG OR ACROSS STREETS OR ROADS.

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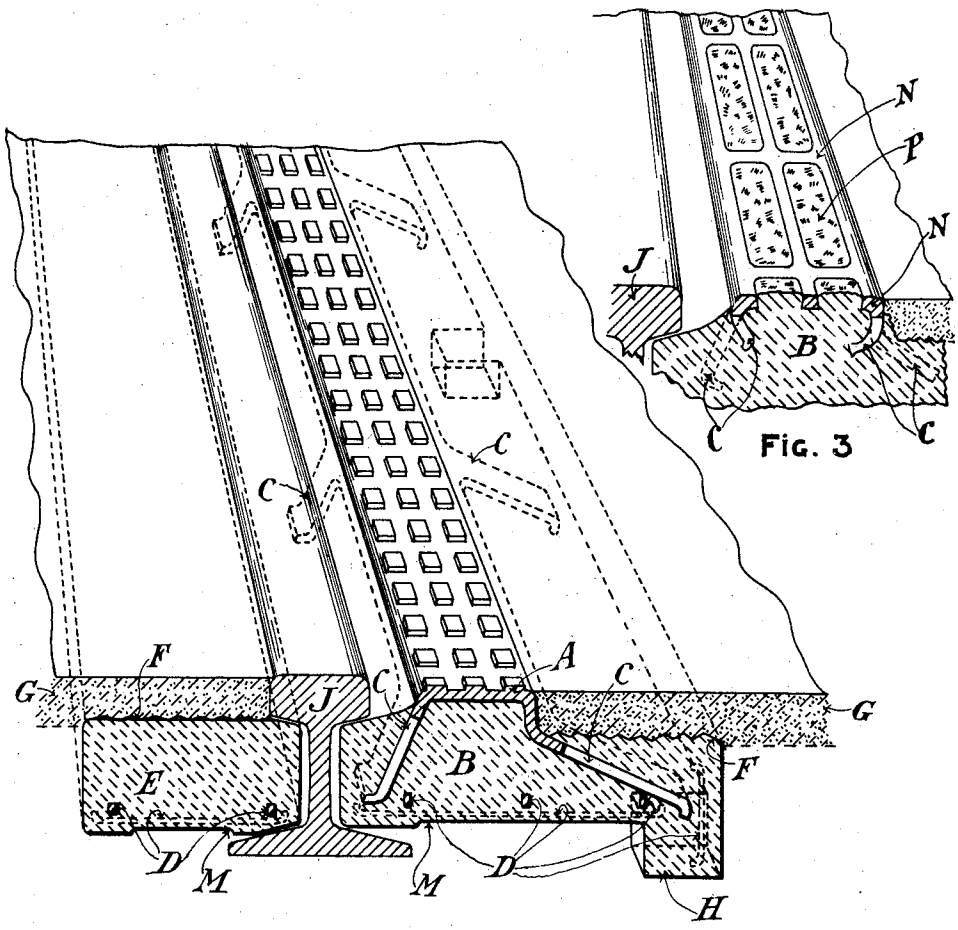

Fig. 3

Fig. 1

Fig. 2

Witnesses.

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CURBING FOR RAILROAD-TRACKS RUNNING ALONG OR ACROSS STREETS OR ROADS.

1,037,716. Specification of Letters Patent. Patented Sept. 3, 1912.

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To all whom it may concern:

Be it known that I, TAGGART ASTON, a British subject, residing in the city and county of San Francisco and State of California, United States of America, have invented new and useful Improvements in Curbing for Railroad-Tracks Running Along or Across Streets or Roads, of which the following is a specification.

My invention relates to the form of curbing to be used adjacent to the rails on railroad tracks running along, or across, streets or roads, or the like.

Figure 1 is a cross section at one rail J of the proposed form of track and curb, also showing a plan in perspective of the continuation of the track and curb on top. Fig. 2 is an outline of the curbing at a joint in the rails. Fig. 3 is a section in perspective showing the modification of the curbing.

It is the main object of my invention to provide on the inner side of each rail, where ordinary road vehicles on the existing forms of track quickly wear away an undesirably deep and wide groove, a metal lip or surface A (or "grille" N as in Fig. 3), running longitudinally with, and adjacent to, the rail at a sufficient distance apart therefrom to allow the flanges of railroad cars free passage, and embedded or inserted into concrete curb blocks or continuous mass of concrete B, to take the place or be auxiliary to the lip on girder tram rails, or the stone, wood, or composition blocks as at present used, thus presenting in an economical manner a hard wearing surface, at the points requiring same, to resist street traffic and to offer the minimum of obstruction to vehicular traffic crossing the rails, and, at the same time, by reason of the other improvements combined in the claims for this curbing, providing a curb easily put in place, maintained, or removed, and giving improved strength and resistance against the strains which would be imposed on the curbing and the surfaces adjoining it.

The method of laying the curbing might be, either by arranging the metal lip and metal reinforcements in their positions adjacent to the rail and then filling around them with concrete, or, preferably, by placing previously molded blocks containing the metal lip and reinforcements in the position shown on the drawing, and laid on a prepared bed of cement mortar or other suitable material, the face of the block adjoining the web of the rail being first rendered with mortar in order to fix it in a proper and permanent position against the rail.

Longitudinal, crosswise, vertical, or diagonal metal reinforcement to consist of one or more metal rods D, D, D, would strengthen the concrete curbing so that, made in long blocks, it will act as a girder resting, as it will, about one inch above the ties, and can thus be readily packed and retained at the proper level and surface in the same manner as the rails and ties. The projection H under the curbing B will occur at intervals of about two to each fifteen foot length of curb, for the purpose of catching in the material between the ties in order to resist lateral or longitudinal "creep" or movement of the curbing. This projection would preferably be reinforced with metal bars embedded therein. The under side of the curbing might be grooved as at M so as to assist in preventing lateral displacement. Metal projections, such as C, C, can either form a part of the metal lip A, or "grille" N, or can be riveted or otherwise secured to said metal lip or "grille", they will be embedded in the curbing at intervals and will serve to secure the metal lip or "grille" thereto, also acting as a reinforcement to the blocks, and in order to give a more secure hold may be turned down at the ends. The surface of the metal lip or "grille" can be perforated, studded, roughened, or corrugated so as to give a secure foothold for persons or animals. The upper concrete surface of the curb is shown to be below the street surface and roughened as at F so as to permit of a layer of asphalt or surface material G covering it and extending with an unbroken surface from one metal lip to the other, thus permitting of the renewal or repair of said asphalt or surface material without impairing the permanency of the curb. A reinforced curb E similar to B, excepting that the metal lip A (or N) and projections C, C, would be omitted, may be used on the outer side of, and adjacent to, the rails, to have the top concrete surface lower than the road surface.

Fig. 2 is a plan of the outline of the curbing at a joint of the rails, and shows a notch in the curb at K which is provided to allow for the projection of the fish-plates and track bonding.

Fig. 3 shows a more economical application of the invention in so far as the metal

surface is concerned; it is a metal "grille" (having attachments C, C, similar to those in Fig. 1) consisting of one or more metal bars joined together at intervals with cross metal strips R, R, having spaces between through which the concrete of the curb may project with a roughened surface, thus serving the same purposes as the solid metal surface A, but would be more economical as it would require a lesser weight of metal for the same width of surface. The rail J and the "housing" of the curb under the head thereof are shown for illustrative purposes. Further, it is proposed to use such combination, or combinations, of the devices or constructions shown as may serve to accomplish any of the purposes enumerated.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. The combination with a railway, of metal curbings located parallel with and at a distance from the inner sides of the rails to allow the passage of the wheels, said curbing having their side edges provided with downwardly diverging metal projections or arms embedded in the surface between the rails.

2. A street car track including parallel rails, a surface of concrete and asphalt between said rails, narrow metallic curbings fixed parallel to and at a distance inside of the rail heads, sufficient to allow free passage of wheel flanges, and arms projecting from opposite sides of said curbings and adapted to be embedded in the material between the tracks to resist longitudinal and lateral creeping.

3. A railway track consisting of a concrete bed having projections H at intervals, parallel rails having their flanges supported beneath the concrete bed, narrow metal curbings extending parallel with and separated from inside of the rails and having roughened upper surfaces, arms formed with and projecting downwardly from said curbs into the concrete material in which they are embedded, and a superposed finished coating of asphalt extending between the curbings.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

TAGGART ASTON.

Witnesses:
A. K. DAGGETT,
F. F. TUEWING.