March 19, 1935. J. F. DOHRWARDT 1,995,273

CHAIN LINK

Filed April 24, 1933

Fig. 1.

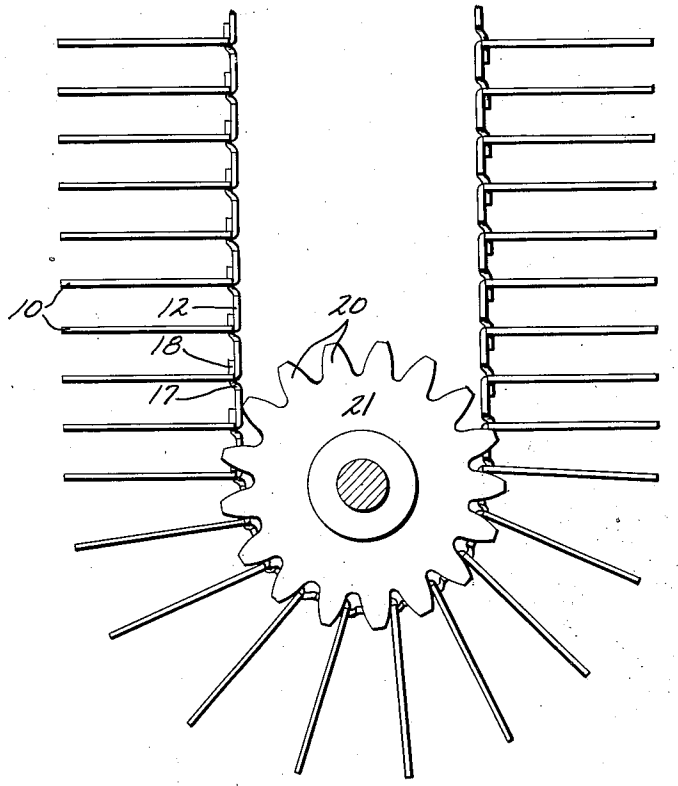


Fig. 2.

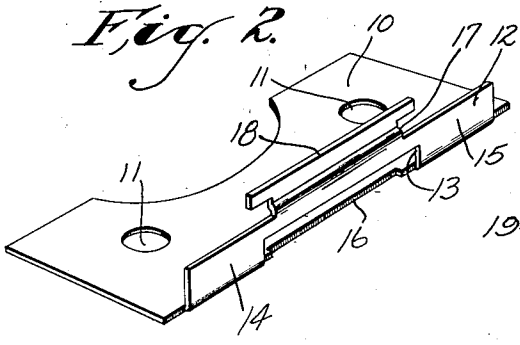
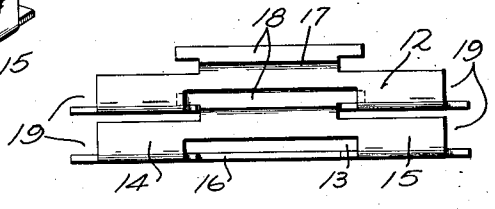


Fig. 3



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CHAIN LINK

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4 Claims. (Cl. 198—154)

My invention relates to an improvement in chain links.

The object of my invention is to provide a chain link in which is incorporated a shelf or platform to be used as a support, agitator, or paddle and the provision of means for separably interlocking each link with its adjacent link and to so dispose the various portions of the interlocking devices that the platform or paddle is normally disposed at right angles to the path of travel of the chain.

Another object of my invention is to provide a link and platform for a chain in a dispenser wherein the various platforms are disposed substantially parallel to one another in the straight paths of travel of the chain and the platforms will become somewhat separated at the turning points around sprockets or other guiding means.

Another object of my invention is to provide a chain link which is cheaply made of pressed, forged or stamped metal.

In the drawing:

Figure 1 is a side elevation of a conveyor in a dispensing mechanism and disclosing my chain links disposed about a sprocket.

Figure 2 is a perspective of an individual link made in accord with my invention.

Figure 3 is an elevation showing two of my chain links in interlocking relation.

Like parts are indicated by the same reference characters throughout the several views.

The particular chain link disclosed in the drawing is intended for use in a mechanism for dispensing candy bars or other similarly shaped packages or articles which are best supported by a platform 10 provided with apertures 11 which not only reduce the weight of the individual links of my conveyor chain but also provides for ventilation to maintain the candy bars in good condition during their storage period in the dispensing device, or permit circulation around articles immersed in or drawn through water or liquid. It will be understood that the platform 10 may be made in any size or configuration to suit the particular service for which my chain may be used.

Along one side of the platform 10 I form a stretcher link 12 which is apertured at 13 and therefore provides spacer members 14 and 15 preferably formed integral with the material of the platform 10. The platform 10 is notched at 16 and the spacer members 14 and 15 are spaced laterally from the notched portion 16 of the platform. The stretcher 12 is extended at 17 to form a neck which is offset approximately the thickness of the material of the platform and the stretcher, and a head 18 upon the neck 17 is therefore disposed vertically above the notch 16 in the platform 10.

It will be noted that the stretcher 12 with its spacer members 14 and 15 is shorter than the platform 10 and space is provided at 19 at either end of the stretcher member for the reception of the teeth 20 of sprocket 21 as shown in Fig. 1.

The structure thus far described discloses a link, the head and neck of which is receivable through aperture 13 and since the head 18 is longer than the aperture 13, a lacing operation which will be obvious from the above description accomplishes an interlock of the lateral extremities of the head behind the spacer members 14 and 15. The lacing operation referred to is accomplished when the platforms of the two links concerned in the lacing operation are disposed at an angle to one another and when the lacing operation is complete so as to dispose the extremities of the head behind the spacer members 14 and 15, the platforms may be swung into parallelism so as to dispose the neck of the one link in the notch 16 of the platform of its adjacent link. The resulting association of the two links disposes the head in interlocking relation with the platform and stretcher of the adjacent link and the interlocking relationship is maintained by the close fit of the neck 17 and notch 16.

The fact that the head 18 is offset toward the platform from the stretcher 12 disposes the stretchers 12 of the various links in the chain in a common plane as indicated clearly in Fig. 1.

When a chain made up of my new links is disposed over the sprocket 21, the teeth extend through the notches provided at 19 and any rotation of the sprocket 21 will cause the chain to progressively present new links to the sprocket and leave the sprocket upon the other side.

It will be noted that as the links assume a position upon the pitch diameter of the sprocket 21, the various platforms assume an "open" relationship so that any articles disposed upon the platforms may be released easily at this location.

My improved chain link is easily formable in a series of stamping or forging operations as will be apparent to anyone skilled in the art, for each link may comprise a single piece of stamped or forged metal or other suitable material wherein the platform, the stretcher, the neck and the head are integral. The stretcher is approximately at right angles to the platform and the neck and head form extensions of the stretcher and the

neck is offset approximately the thickness of the material to dispose the head in proper relationship to the stretcher so that it may be disposed "inside" the stretcher of the adjacent link.

I claim:

1. A chain link comprising a platform and stretcher flange providing an aperture at the junction of said platform and stretcher flange, the stretcher flange being provided with a T-shaped extension, and the extension being offset in the direction of the platform.

2. A chain link comprising a platform notched to receive a neck portion of an adjacent link, a stretcher flange attached to the platform at either side of the notch, and a headed extension for the flange including a neck portion receivable in the notch of an adjacent link, the head of the extension being formed to interlock with the flange and platform.

3. A chain link receivable upon a sprocket, said link comprising a platform, a stretcher flange at right angles thereto and provided with a T-head, the stretcher flange being shorter than the platform to provide a notch to receive a tooth of the sprocket.

4. A chain including the combination with a notched platform and a stretcher flange at an angle thereto and provided with an aperture laterally more extensive than the notch, of a neck and headed extension for the flange, the neck being offset whereby to align the neck with the notch and to dispose the head in position to engage the platform of an adjacent link.

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