CLAIMS

What is claimed is:

1. A gap blocker for a roller conveyor having upstream and downstream rollers for conveying an object in a downstream longitudinal direction and a gap between the upstream and downstream rollers, the gap blocker comprising:

a body configured to be supported in the gap by the upstream and downstream rollers as the upstream and downstream rollers rotate during operation of the roller conveyor;

an upper blocking portion of the body to inhibit the object from falling through the gap;

upper contact portions of the upper blocking portion for slidingly contacting the upstream and downstream rollers above a narrowest portion of the gap;

a plurality of laterally spaced upstream leg portions of the body connected to the upper blocking portion and having upstream distal end portions to be positioned below the narrowest portion of the gap for keeping the body in the gap; and

a plurality of laterally spaced downstream leg portions of the body connected to the upper blocking portion longitudinally spaced from the upstream leg portions so that the upstream and downstream leg portions have a space therebetween extending in a longitudinal direction, the downstream leg portions having downstream distal end portions to be positioned below the narrowest portion of the gap for keeping the body in the gap.

2. The gap blocker of claim 1 wherein the body includes upstream lateral spacings laterally spacing adjacent pairs of the upstream leg portions and downstream lateral spacings laterally spacing adjacent pairs of the downstream leg portions; and

wherein the upstream lateral spacings are longitudinally aligned with the downstream lateral spacings to facilitate cutting of the body in a longitudinal direction through an aligned upstream and downstream lateral spacing of the body.

3. The gap blocker of claim 1 wherein the upper contact portions include an upstream contact portion having a plurality of upstream recesses and a downstream contact portion

having a plurality of downstream recesses to reduce contact areas between the body and the upstream and downstream rollers;

wherein, preferably, the body includes upstream lateral spacings laterally spacing adjacent pairs of the upstream leg portions and downstream lateral spacings laterally spacing adjacent pairs of the downstream leg portions; and

wherein, preferably, the upstream lateral spacings are longitudinally aligned with the upstream recesses and wherein the downstream lateral spacings are longitudinally aligned with the downstream recesses to facilitate cutting of the body in a longitudinal direction through longitudinally aligned ones of the upstream recesses, downstream recesses, upstream lateral spacings, and downstream lateral spacings.

4. The gap blocker of claim 1 wherein the plurality of upstream leg portions include at least four upstream leg portions and wherein the plurality of downstream leg portions include at least four downstream leg portions; or

wherein the upstream and downstream leg portions include a plurality of pairs of longitudinally aligned upstream and downstream leg portions.

5. The gap blocker of claim 1 wherein the longitudinal spacing between the upstream and downstream leg portions extends continuously from the upper blocking portion of the body to the upstream and downstream distal end portions of the upstream and downstream leg portions.

6. The gap blocker of claim 1 wherein the upstream leg portions are configured to be spaced from the upstream roller during operation of the roller conveyor;

wherein, preferably, the downstream distal end portions of the downstream leg portions are configured to slidingly contact the downstream roller during operation of the roller conveyor.

7. The gap blocker of claim 1 wherein the upstream and downstream leg portions are resilient to permit the leg portions to be deflected as the gap blocker is positioned in the gap.

8. The gap blocker of claim 1 wherein the upstream and downstream leg portions have outer surfaces above the upstream and downstream distal end portions configured to be in clearance with the upstream and downstream rollers with the body supported in the gap by the upstream and downstream rollers.

9. The gap blocker of claim 1 wherein the body includes upstream open-ended slots laterally spacing the upstream leg portions apart from one another; and

wherein the body includes downstream open-ended slots laterally spacing the downstream leg portions apart from one another.

10. The gap blocker of claim 1 wherein the body has opposite lateral side portions extending between the contact portions of the upper blocking portion; and

wherein at least one of the lateral side portions of the body includes a resilient biasing member configured to engage an adjacent surface and apply a biasing force in a lateral direction against the adjacent surface;

wherein, preferably, the gap blocker is provided in combination with another gap blocker, the other gap blocker having another resilient biasing member that includes the adjacent surface.

11. The gap blocker of claim 1 wherein the upper blocking portion includes an upper channel to provide clearance for a drive member extending between the upstream and downstream rollers.

12. The gap blocker of claim 1 wherein the upper blocking portion includes an upper surface for spanning across the gap and a lower surface opposite the upper surface; and

wherein the lower surface includes a plurality of recesses and transversely extending surface portions associated with each of the recesses.

13. The gap blocker of claim 1 wherein the upstream and downstream leg portions each include an upper end portion connected to a lower surface of the upper blocking portion and a free end opposite the upper end portion, wherein each of the upstream and downstream leg portions are separated from the adjacent upstream and downstream leg portions for the entire extent thereof.

14. The gap blocker of claim 1 wherein the body has a unitary, one-piece construction.

15. The gap blocker of claim 1 wherein the body has a width that extends longitudinally when the body is in the gap and a length perpendicular to the width that extends laterally when the body is in the gap, the length being greater than the width.