

ABSTRACT

SPREADER FOR MULTISTAGE CONTAINER STACKING

A spreader for multistage container stacking comprising a flipper beam having a pair of corner flippers upwardly and downwardly movable along the end surface of an end beam of the spreader; a couple of right and left wires paid out from a pair of drums on the end beam, guided vertically downwardly along the opposite ends of the end beam, and tied at the ends thereof to positions straddling the center of gravity of the cross sections of the flipper beam and the corner flipper to support the flipper beam; a flipper lock pin mounting/removing device provided on the vertical side surface of the corner flipper, the flipper lock pin mounting/removing device having a lock pin insertible into and removable from a side surface opening of the spreader or a lower corner fitting of a container; a rotary encoder provided in association with the drums for detecting the amount of upward or downward movement of the flipper beam; and a lower end detecting sensor provided on the flipper beam for detecting the lower end of the container with a layout in which its light is transmitted obliquely in a horizontal plane beside each of the lower corners of the container.

FIGURE 1

This Sheet Has Been Replaced

