

25—Hoisting Apparatus and Conveyors



FIG 25-32 —Failure to replace hinged cover or any other safeguards could lead to serious injury. Although this photograph is posed, it is a reconstruction of the facts of one lost-time accident. One worker failed to replace this cover. Another, taking a shortcut, missed his footing and stepped into the open conveyor instead of on to the adjacent grating. The resulting injury to his right foot disabled him for three months.

- A **BUCKET ELEVATOR** carries fixed buckets in a vertical or inclined path. The buckets discharge by gravity as they pass over the head sheave or drum.
 - A **GRAVITY-DISCHARGE** conveyor-elevator has fixed buckets and operates in vertical, inclined, and horizontal paths. The buckets act as flights while carrying material along a trough in the horizontal plane to a point of gravity-discharge.
 - A **PIVOTED-BUCKET** conveyor also operates in horizontal, inclined, and vertical paths. The buckets remain in carrying position until they are tipped or inverted to discharge.
- Bucket conveyors should be totally enclosed in a housing to protect operating personnel.

No attempt should be made to take samples when the conveyor is in motion.

The pivoted-bucket conveyor has tripping devices for emptying the buckets at desired locations. These tripping devices frequently are movable so that the material can be distributed evenly in the storage bins. If the control lever mechanism for shifting and locking the trippers is arranged for remote control, workmen will not have to go on the conveyorway to change the position of the trippers.

For the safety and convenience of repairmen and operators, it is advisable to provide a permanent footwalk alongside a conveyor that hoists material and carries it over stokers or bins. The footwalk should be well lit and