slides should be attached to the frame of the shear at the rear so that the helper will not have to reach close to the knife to catch the work

On all squaring shears the entire length of the treadles should be provided with fixed guards Such guards should be placed above the treadle, with room between the guard and the treadle only for the operator's foot To make accidental tripping of the shear impossible, an extra foot latch can be attached to the treadle

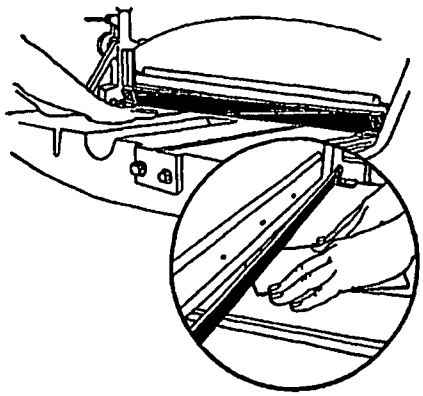


Fig. 23-40. Fixed barrier guard for metal squaring shear, placed at an angle which permits excellent visibility of cutting line.

On foot-power operated squaring shears it is good practice to put a stop block on the floor at a point where the treadle strikes it. This stop block should be low enough to permit tripping of the shear but high enough so that the operator cannot bring the shear down on his foot

Alligator shears

Alligator shears perform a great variety of cutoff operations Their principal use, however, is in salvage yards where they are used in forging operations for cutting rods and bar stock to length

The alligator shear operates continuously, and the operator must be trained to time his movements with the opening and closing of the cutter. Because the machine is relatively simple and comparatively slow in its movement, management and operators are inclined to disregard the hazards created Consequently, alligator shears are responsible for far more injuries than their inherent hazards or frequency of use warrants

The principal hazards from operating an alligator shear are finger or hand amputation at the shear point, finger injuries from being pinched between pieces of material being cut, hand or arm lacerations from handling material, eye injuries from flying bits of metal, foot and leg injuries from falling material, injury to the operator or damage to the machine from failure to maintain the shear in a good condition.

If possible, a long bench should be built to the right or left of the shear, depending upon the type of machine, and the material slid along and through the cutter. Because the ragged edges are hazardous to handle, care should be used in piling the material onto the bench

Most finger and hand injuries can be avoided by the installation of an adjustable guard. The wide variety of sizes and shapes of material to be cut makes it difficult at times to guard closely the point of opera-

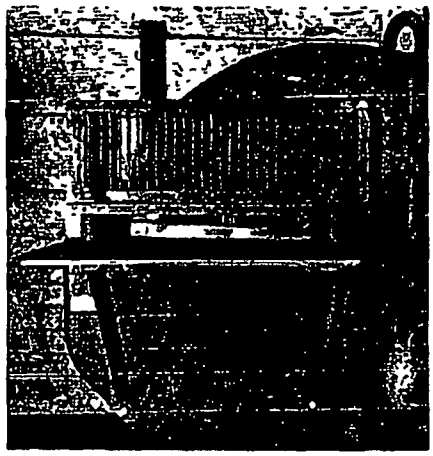


Fig 23-41 Barrier guard for an alligator shear has hold-down bar to prevent material from flying upward.