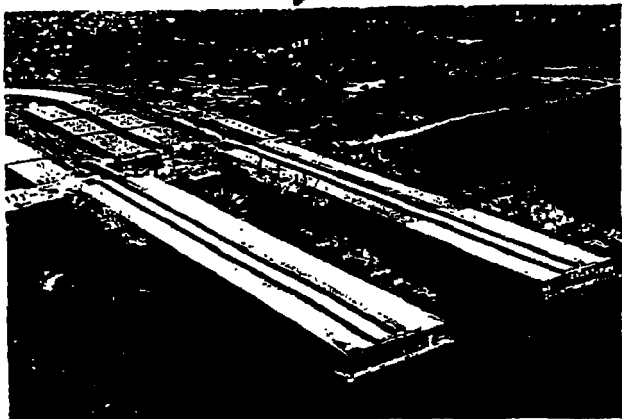


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Aerial view of Norfolk and Western Railway Pier "S" and "L" on the Elizabeth River at Lambert Point, Va., which are protected against the spread of fire below decks by wrought iron fire curtains.

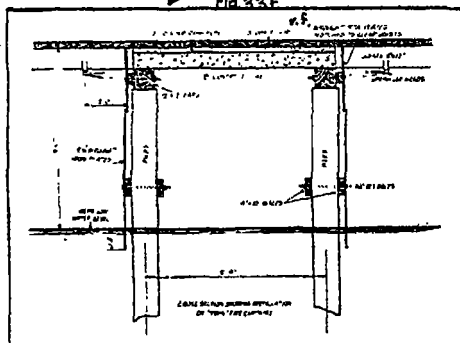
Right: Cross section diagram showing construction of "iron" fire curtains.

IN SEVERE cases of the availability of unlimited quantities of water, piers and wharfs have suffered many disastrous fires. Many of these fires start below decks and spread almost the full length of the pier before breaking through the floor level. By that time they are practically out of control.

Such was the case early in 1945 when two fires virtually destroyed a railroad produce pier and a government shiploading platform in the waterfront area of Hampton Roads, Va.

Measures designed to prevent below-deck spread of fire were recently installed by the Norfolk and Western Railway at Piers "L" and "S", Lambert Point, Va. This protective equipment consists of twin wrought-iron plate fire walls below the decks. These are supplemented by manually operated sprinklers.

The piers are each 207 feet wide and approximately 1200 feet long. Both were built in 1916 on timber piling with three-inch wood floors. Sheds have steel columns and roof trusses.



Fire Curtains Guard Pier

When the piers were originally built, reinforced concrete firewalls were installed below decks, but severe tidal action and corrosive industrial acids and salt water rendered several of these walls useless.

The new wrought iron fire curtains were fabricated of 5/16-inch plate. They extend the entire width of each pier, spaced at intervals of approximately 300 feet along the length of the

piers. The plates are notched to clear joints and stringers. Not more than 3/4-inch clearance was allowed between the timber and metal. There is a four-inch clearance between the fire walls and the timbers to which they are bolted.

These walls constitute a double curtain of protection since there is approximately a 10-foot space between

—To page 23

Where There's Smoke

There Needn't Be a Fire Hazard

WHEN Caterpillar Tractor Company decided, in March 1946, to permit smoking in its Peoria, Ill., factory the company began a continuing study of the results of this move . . . made only after deliberate consideration concerning fire hazards, and selection of certain smoking restrictions in designated factory areas.

To date not a fire resulting from smoking in the plant has been recorded, and violations of company smoking standards have been few and far between. It has also been noted that the new practice has improved employee relations and individual morale.

The general overall "housekeeping" problem that results from smoking in an industrial plant has been handled in orderly fashion by distributing receptacles, at strategic locations, where employees may discard cigarette and cigar butts, pipe dottle and used

matches. Use of these receptacles promotes safety and cleanliness.

Employees welcomed the chance to smoke while at work. Factory supervision, the industrial relations manager and safety engineers report consistent cooperation at every turn.

All "Caterpillar" factory buildings are of steel and masonry construction and the entire plant is protected by an automatic sprinkling system. The floors of the factory are constructed of three-inch creosoted blocks, laid on five inches of concrete, and sealed with tar. Further safety is assured by controlling absorption of oil on the floors through use of commercial preparations consisting mainly of diatomaceous earth.

After more than a year trial, it appears as though the new practice at "Caterpillar" is successful, and at present nothing has occurred to indicate a necessity to return to the former restriction.

Sm 71

1. There's a satisfied expression on this inspector's face as he puffs away on a cigar.

2. Enjoying a pipe does not interfere with inspection of caterpillar trucks.

3. Working on the engine assembly line does not prevent smoking.

4. Receptacles are placed so that employees may discard cigarettes, cigars and pipe dottle before entering a restricted area.

