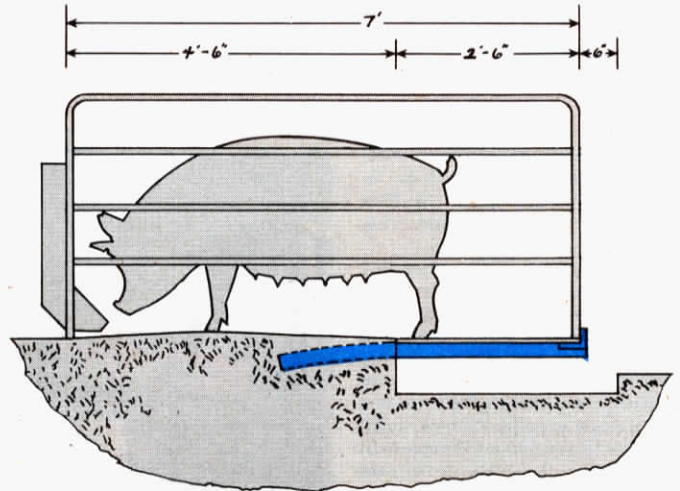




Rear of crate is suspended over gutter and supported by the cantilevered bar (¾ in. by 2 in. by 4 ft. long) partially embedded in concrete. Bars are spaced 4 ft. apart. Opening between end of crate and gutter provides room for offset-hoe used to hand clean the gutter.



drawing courtesy, National Hog Farmer

## PROVIDES HIGH SPEED "HAND CLEANING" FOR A FRACTION OF THE COST OF AUTOMATION

# Slick New Way To Clean Hog Barns

Hottest new manure-handling idea for new or remodeled hog barns is a cantilevered floor design that provides high speed hand cleaning for very low cost. Developed in Canada, the amazingly simple system is catching on fast.

Instead of costly pits, mechanical scrapers or flush systems, it relies on a speedy method of hand cleaning to do the job. You can hand clean farrowing crates and pens as fast as you can walk down the aisle.

"An eight year old girl can clean out both sides of the aisle in less than a minute," says Rodney Koser, Elbow Lake, Minn., hog producer who was one of the first in the United States to use it. He's incorporated the basic system into the new pitless

"Automatic Farrowing" house he's now producing commercially, and which was featured in FARM SHOW earlier this year (Vol. 4, No. 2).

Key to the popular new way to handle manure in hog barns is the cantilevered floor design (see drawing). The rear end of each sow gestation or farrowing stall, or the slatted end of a pig nursery pen, is suspended over a gutter (about 4 in. deep and 2 ft. wide) running at right angles to the stalls or pens. This gutter is quickly scraped down by hand with an especially designed push hoe.

The cantilevered floor idea was originally developed by Canadian Mennonites. It readily adapts to gestation stalls, farrowing crates and pig nurseries. With modifications, it

could possibly also be adapted to growing-finishing facilities, J. Garnett Norrish, University of Guelph swine specialist in Ontario, told FARM SHOW.

Cheapest and most popular way to clean the gutter under the cantilevered floor is to hand scrape it, although it could be cleaned with a mechanical scraper, or a flush system. Most Canadian hog producers using the system have opted for hand cleaning because of the cost saving, and the fact that a child or adult can clean behind many sows or pigs in only a matter of minutes, according to Norrish.

"I personally cleaned out a building housing 250 weaner pigs in less than 30 seconds, pushing the offset

hoe along the gutter. A barn with 25 to 30 sows would take about the same amount of time," he points out.

Another key feature of the cantilevered floor - gutter system is that it readily adapts to new or existing facilities. What's more, it's easy to install yourself. A steel bar imbedded in concrete holds up the slatted, cantilevered end of the crate (or nursery pen) floor to suspend it over the gutter.

If you'd like a set of "how to" blueprints for constructing the new way to clean hog barns, contact: FARM SHOW Followup, J. Garrett Norrish, Animal Science Department, University of Guelph, Ontario, Canada N1G 2W1 (ph 519 824-4120). Ask for Canada Plan No. 3801.

## CATCHING ON FAST WITH INDIVIDUALS, SCHOOLS, CLUBS

# Portable Court Brings Horseshoe Pitching Indoors

If you're a horseshoe pitcher, you'll be interested in a new portable court that lets you pitch horseshoes indoors as a year-around sport.

Arnold Tool and Die Works, Council Bluffs, Iowa, has come up with Port-A-Court, a steel frame and stake that can be set up indoors in a matter of seconds.

The Port-A-Court is the result of testing about 20 different designs. Besides the heavy duty stakes that can stand the constant beating, the metal frame around the stake is covered with a heavy rubber mat that makes the shoe cling like it does in a clay court. There are also springs under the mat that absorb some of the shock and keep the shoes from bouncing out of the box.

Most recent improvement is a textured rubber that has even better holding quality.

"Shoes occasionally roll out of the box, especially with beginners," says designer Jim Hackett, "so we recommend that the surrounding area be protected with a carpet, canvas, or other material. We've found that particle board provides effective, cheap protection."

The indoor courts sell for \$279 a pair, and they are catching on fast with individuals, schools and clubs.

For more details contact: FARM SHOW Followup, Arnold Tool & Die Works, 3135 W. Broadway, Council Bluffs, Iowa 51501 (ph 712 323-9330).



Springs under the heavy rubber mat help keep shoes from jumping out of the box.