

# Modern Ideas Produce More Profits

## Hess Farm Uses Brains to Rest Brawn

Not quite two years when a salesman for a farm-type, mixing hammer-mill visited the J Zeigler Hess farm east of Quarryville, he found a situation ideally arranged for his product. He discussed the arrangement with Mr Hess and his co-partner sons, Henry and Robert, and today the Hess farm boasts a feed handling system second to none.

The feed is used for their 8,000 hen laying flock. A large share of it is home grown. Herein lies another facet of the system.

In the past with 80 to 90 acres of corn in the field just before harvest when corn prices are highest Hess found himself without corn. In 1955 through the purchase of a combination small grains combine-corn picker-sheller and a wagon type grain driver, they started harvesting corn well in advance of the regular season.

This year for instance Robert was in the field on Sept 16 a full month ahead of the regular corn harvest in Lancaster County. Then thanks to their ultra-modern home feed plant the corn was processed and returned via eggs within days. So far he has harvested and dried about eight acres with the units this year.

Some of the earlier grain was slightly wetter than he prefers running as high as 35 per cent moisture, but since the middle of September everything has operated smoothly.

Dumping the shelled corn from the picker bin Robert starts filling the box of the driver and starts the drying process. With each new load from the picker the driver gradually fills and is left to complete the job.

Then the dried grain is augered from the dryer into a truck and hauled to the feed plant, at the home farm. There it is dumped mechanically of course into a ground level pit elevated into a bin and started through the mill.

The mill regulates the flow and mixes as many as four ingredients while completely grinding 1,200 lbs hourly. The automatic controls can be set to operate for a certain length of time — and — have built-in safety features to shut off the power. If one ingredient stops flowing into the mill the mill is jammed (although a magnet protects it from metal going through), a part breaks or other unforeseen emergencies arise.

In short, all the operator has

to do is make sure the gravity flow bin above the mill is full so the dials, start the two-horse power motor and walk off.

The surprise in store for the mill's salesman when he arrived at the Hess farm was the four-bin grain storage unit just off the main driveway, complete with dump-pit — and gravity feed from all bins to alley ways beneath the bin floors.

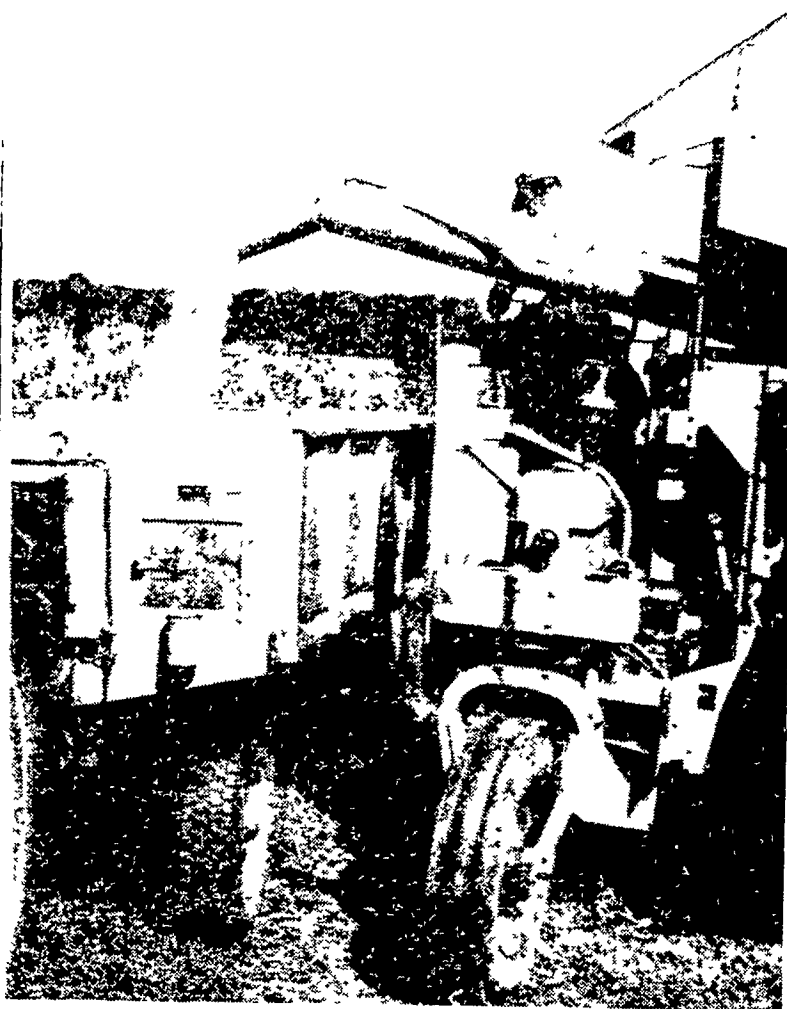
Henry insists this "perfect" arrangement was unintentional. Dad bought these bins in a bunch from the Quarryville government bin site. We started to set these four up here, and he decided to dig out the hillside and fix it so we could drive in under them and use sliding trailers to empty the grain into our truck.

Then since the round bin were fitting fairly close together, he built a roof over the center section to have storage in between. We already had the dump-pit and augers, so when the mill was put in all we had to do was build a divider bin over it to hold each batch of feed for mash, set the mill in, run a few lifts build a catch bin for the ground mash with a gravity flow into the alley-way and back the auger out under it.

Then mash includes the shelled corn, wheat and concentrated supplement. The supplement is purchased in bulk, dumped in the pit and augered into the mix bin.

The final result of this arrangement is a very non-strenuous system for handling all the grain on the farm plus a \$10 per ton saving on laying mash over commercial mixes. The savings on costs of having mash ground commercially from home grown feeds paid for the mill the first year.

The Hess family still uses shovels, for cleaning up after the augers and they find plenty on their farms to keep them busy, but as the mill salesman said, "This set-up is near perfect."



EARLY-SEASON wet corn "pours" from the picker spout into Hess's wagon-type, diesel-fueled grain driver, as Bob Hess beats the 1958 corn picking season by several weeks. Corn with moisture content as high as 35 per cent has been processed with these units this year and eggs produced with it already eaten. LF PHOTO

## Meat Imports Up: U.S. Slaughter Off

Imports of meat and meat products into the U.S. during the first six months of 1958 were more than double those of the same period a year earlier, according to latest figures of the Foreign Agricultural Service.

The figures show that 213.6 million pounds of beef and veal were imported during the January-June period of 1958 compared with 76.9 million for the comparable period of 1957, 84.8 million pounds of pork during the 1958 six-month period, compared with 71.0 million in 1957, 111 million pounds of lamb, mutton, and goat compared with 15 million and 37.8 million pounds of

other canned, prepared, or preserved meats were imported from Jan. to June 1958 compared with 3.4 million pounds from January to June 1957.

In contrast production of red meat in commercial U.S. slaughter houses totaled 15,806 pounds — six per cent below the same 1957 period. Of the total Jan.-August volume 8,549 pounds were beef, down eight per cent from last year. Veal — 745 million lbs., down 23 per cent. Pork — 6,059 million lbs. down one per cent, and 453 million lbs. were lamb and mutton down four per cent.

Poultry slaughter during this past August is reported at 547 million pounds, ready-to-cook basis 24 per cent above August 1957.

## Six Factories To Flake '588 Tubers For New Product

A total of six manufacturers — twice the number in production last year — expect to convert more than 4 million bushels of this fall's potato crop into potato flakes, a new dehydrated mashed potato product developed through research by the U.S. Department of Agriculture.

Three new processing plants for potato flakes have recently begun operations or are ready to start at Bakersfield, Calif., Island Falls, Maine, and Wavland, N.Y. Three additional plants began production last year at Idaho Falls, Idaho, Hartland, Maine. Several other factories for and Ontario, Oreg.

making potato flakes are under construction in Idaho, Michigan, and North Dakota. Canadian and European concerns are also considering manufacture of the new product. Potato flake plants are already being built at Munich, Germany, and Gmünd, Austria.

The process for making potato flakes was developed by James Cording, Jr. and Miles J. Willard, Jr., under the direction of Roderick K. Eskew in the laboratories of the Eastern Utilization Research and Development Division of USDA's Agricultural Research Service at Pittsburgh, Pa. Public service patents on the process are held by the Secretary of Agriculture, and licenses to use them in the United States are available without charge.

To make potato flakes, fresh mashed potatoes are applied to the surface of a heated drum where they are dried in a few seconds and removed in a parchment-like sheet, which is then broken into flakes and packaged. By simply adding hot water or milk to the flakes, plus butter and salt as desired, the consumer can quickly convert them back into fluffy mashed potatoes that equal fresh mashed potatoes in taste and texture.

Research on this process by the ARS Eastern Division has made it possible to produce high-quality flakes from a wide variety of potatoes grown in different parts of the country.

A special low-temperature pre-cooking step permits the use of many low solids varieties of potatoes in manufacturing this product. ARS researchers have recently found that cooling the potatoes after pre-cooking makes the process even more widely adaptable so that it's now possible to produce excellent potato flakes from potatoes with a solids content as low as 17 per cent. The cooling step also results in smaller sized flakes — which means a greater weight of flakes can be put in each package.

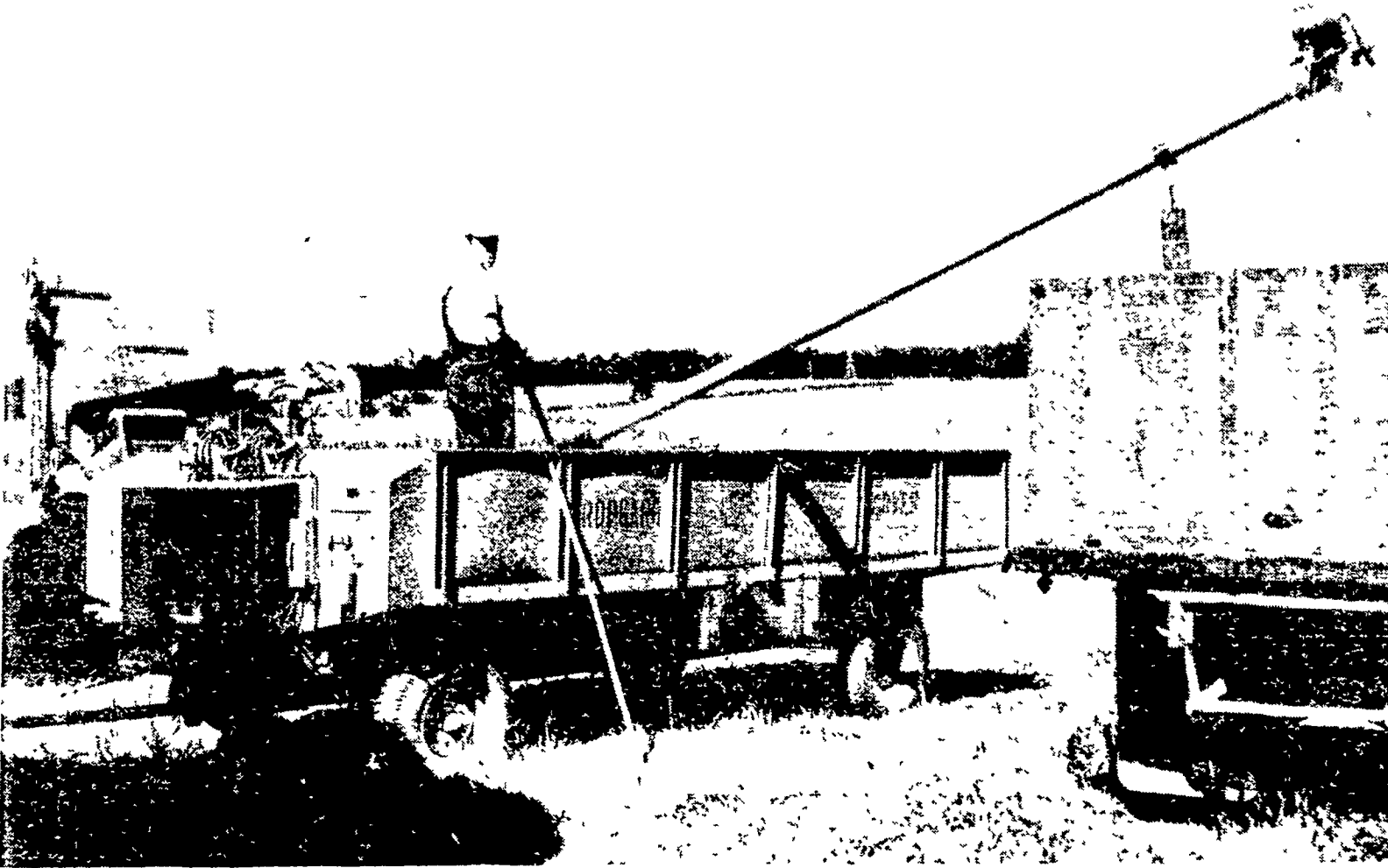
## Poultry Marketing

(Continued from page twelve)

The selection of the award winner shall be the responsibility of the Poultry and Egg National Board Technical Advisory Committee.

Invited guest at the annual banquet. The recipient shall be an honor of the Poultry and Egg National Board where he shall receive an appropriate plaque and honors to be designated by PENB. Although in most instances the award will be given to an individual research worker, the team recipient shall not be interpreted as precluding the eligibility of a research team for the award.

Nominations should be forwarded to Dr. Milo S. Swanson, Poultry and Egg National Board Technical Advisory Committee Chairman, Poultry Department, University of Minnesota, St. Paul 1, Minnesota.



ROBERT USES A shovel to clean up after the auger as the dried grain is transferred to the truck for hauling to the storage-milling site on the "home" farm. Note the

auger mounted atop a cross-tied post behind the truck. This system with the heavy motor above the post permits easy handling of the auger, another Hess labor saver. LF PHOTO