



THIS OUTSIDE view of the 216-foot-long windowless house, shows its compact construction, the service doors, air vents and bulk feed bins



KRAYBILL, IN the foreground, and Charles Keagy, rear, gather eggs along the center "egg aisle" of his streamlined egg factory. Eggs are gathered from the 1,000 feet of nests, three times daily.



THE CHUTES coming through the ceiling, gravity feed mash and pellets from one of the five-ton capacity roof-top bulk feed bins on the house. Feed drops directly into

the automatic feeder hoppers, which are electrically controlled. Should one unit break down, the other will provide ample feed for that side of the house LF PHOTO

Co. Poultryman Pioneers Full-Control

Most Lancaster county poultrymen would consider production of almost 6,000 eggs daily from 8,000 laying hens, with less than 40 hours total labor per week as a nearly perfect operation. Especially during the first year of production from a radically different type unit.

Most poultrymen would. But, not the man who owns and operates it.

Benjamin S. Kraybill, RD 1, Marietta, is a slender, quiet, and extremely unassuming person. But once you inspect his new laying house, a suspicion of hidden talents begins to form in your mind.

The laying house can be described as a windowless, wasteless, and fully automatic egg factory. Ben, being something of a perfectionist, would of course, insist it isn't fully automatic. But even the ancient skill of "picking henfruit" has been streamlined in his plant to where it is hardly more than an inspection tour of the 196-foot-long laying pens.

Feeding is strictly a push-button operation. He doesn't even have to press a button to water his birds. As for the once horrendous task of cleaning the poultry house, you guessed it—it is another button, or rather, three buttons.

This leaves egg gathering, culling, and maintenance as hand labor in the operation.

The most truly unique facets of the operation are windowless construction, controlled ventilation, case-fillers for egg gathering and the egg-room insulation.

Kraybill is sold on windowless construction because of the complete control it offers of the entire operation.

This includes control of ventilation and controlled lighting, complete building insulation; no window upkeep

or reflections from windows; improvement of building maintenance, and the ability to adjust egg production to the time of day most convenient from the labor standpoint through the automatic lighting system.

Controlled ventilation in itself offers several advantages. These include disease prevention, and maintenance of steady temperatures.

House temperature is kept at least 10 degrees below outside readings in summer and will be held around 40-50 degrees in winter.

All lighting is clock controlled, with the layers currently receiving 14 hours per day. If merchandising required having the eggs ready for buyers at noon each day, the lights could be set to have most of the laying done from 10 or 11 p.m. to 10 a.m. or any like period desired.

Kraybill also is considering using the "Stimulating System" with the 42 fluorescent lamps, when his next pullets are placed in the house. When that day comes, the slatted floor, pit cleaner and disease free conditions will enable rapid transition from old birds to young without weeks spent in preparing the house.

Use of case fillers for egg gathering is a relatively new and obvious time-saver. The egg case filler flats are simply stacked six high ready to go in the case, on the three shelves of the gath-

ering cart, as it is wheeled along the egg aisle. When a cart is full, it is wheeled into the cooling room, odd eggs placed in special baskets, and the six-high filler stacks placed in cases after the eggs cool. Usually less than a dozen eggs must go in the odd baskets.

On the surface, the cooling room is no different than any other. It is 14 x 20 feet in size, located in one corner of the service room, with the building's cinder-block walls forming two sides and 2 x 4 studding the other two walls. A three-quarter ton cooling unit holds the temperature at 58-60 degrees.

The inner insulation is the major difference, however. It consists of a gleaming white, 2-inch thick layer of Styrofoam, the sparkly, crisp, white plastic substance often seen in store window displays.

Resembling sponge rubber in its texture, Styrofoam is relatively inexpensive, easy to clean, and very effective in insulating the cooling room. Although it is a new substance for farm insulation, Kraybill heartily recommends it for this purpose.

The building's overall size is 50 x 216 feet. Walls are cinder-block, the roofing is channel drain, copper-coated steel, interior insulation on the ceiling consists of a one-half inch layer of sheet rock, three inches of rock-wool bats, and an air space.

The cinder block walls are coated with a special waterproof cement mixture, sprayed on at high pressure. This type wall was used for economy and insulation. Steel roofing was used because of its inherent strength and the

savings in sheathing beneath it. The half-inch sheet rock was decided upon because of a "no-sag" guarantee.

The 20 x 50 feet service section is at one end, with 14 laying pens occupying the rest of the structure. The service room contains a 14 x 20 egg cooling room, egg washer, distribution and power units of the automatic feeding system, chutes from the roof-top bulk feed bins, supplies, well pump and large water tank.

The laying pens are divided by wire partitions, crossing every 28 linear feet of the building, with a four-foot "egg aisle" running down the center of the building.

Ground breaking for the building foundations was last Nov. 1, with most of the construction being handled by an Amish construction crew. Kraybill emphasizes he would never again build in winter.

On March 29, 3,800 hybrid pullets were housed with the rest of an 8,240 pullet total added on April 8 and 10. Production had already started on April 1st with 30 eggs recorded. April 25th production was 3,000 and by May 18 production reached the 5,000 mark.

On each side of the aisle, the pens have a single V-type water trough running through the center. There are two endless-chain type feed units on each side of the aisle providing feed "insurance" for all layers, in case one motor should burn out or mechanical troubles develop. Ben points out this insurance is one major reason he selected his particular equipment, plus the fact the two units offer four house-

length feed troughs on each side of the building.

With 616 sq ft in each pen and deducting for equipment area, each of the 588 birds in each pen has slightly more than one square foot of floor space. There are 27 nests in each pen, three high, with the slanting wire floor feeding eggs into the collecting tray on the aisle.

The entire floor area of pens is of slat construction, with droppings falling into the pits, which are cleaned twice weekly with a system of three electrically operated pit cleaners. His ten year old son and a manure spreader.

Even after months of use, the slat floors remain exceptionally clean, and with the twice weekly pit cleaning leaves Kraybill with no parasite problem with his flock internal or external.

Many of these features have been incorporated into Lancaster county laying houses before, but as far as Kraybill knows, this is the first windowless, slatted floor automation house of its type in Pennsylvania.

Although there are no windows, 14 insulated doors were installed along each side of the building to be used in moving chicken crates in and out.

Ventilation is handled by a specially designed system of push-pull fans with six psi side providing complete control of air circulation in any weather. The system was paid for by savings in the windowless construction. A complete change of air is made every three minutes in summer and six minutes in winter.

A lot of people were waiting

(Continued on page eleven)