Tailor-Made Weather for Homes Now an Actuality

Slight Change Converts Heating Plant From One-Season Affair Into Year-Round Air Conditioning System.

Here's How Much Heat Your Body Generates From a Single Dinner

"Blame that unfortunate habit of eating, and not only the weather, for the discomfort you feel in summer!" says the Holland Institute of Thermology of Holland, Mich.

Eating is like fueling a heating plant. Heat is generated in both cases. But the heat values of foods and of fuels are measured by different standards. The calory is the heat unit for foods. The British Thermal Unit is the measure which heating engineers apply to fuels. Thus, one cubic foot of manufactured gas contains 550 B. T. U.'s, and one pound of coal from 9,000 to 16,000 B. T. U's.

Here is a typical hot weather dinner menu, showing the amount of heat it generates in the body:

	Calories
Cold boiled ham	200
Escalloped potatoes	100
Vegetable salad (tomato, cucumber, lettuce, with french dressing	200
Roll and butter	200
Ice cream	300
Frosted cake	200
Black coffee with sugar	100
	1,300

One calory equals nearly four B. T. U.'s. So 1,300 calories is equivalent to the heat that would result from burning more than nine cubic feet of gas. This illustrates why, as the Holland Institute of Thermology explains, excessive heat must be carried away if the body temperature is not to work up to fever pitch in hot weather.

When the heat wave is at its hottest, when the baby's skin is red with rash and its stomach is upset, when grandmother and grandfather are gasping for breath with high blood pressure and rapid pulses, and when every hour that mother must spend in the kitchen seems a torment—don't just curse the weather man, advises the Holland Institute of Thermology of Holland, Mich. Potential relief waits in the basement of nearly every home, ready to spread the comfort of coolness.

For, just as modern air conditioning science has made it possible to keep the movie theater "70 degrees cool" while the temperature outdoors is above 90, so it is possible to keep the dwelling house a refuge from outdoors heat during the hottest weeks of summer.

Only, whereas the cooling of public buildings and other big structures requires complicated and expensive machinery, home cooling can be accomplished at a minimum of expense with slight changes in the same equipment that supplies heat in winter.

To understand why this is so, the engineers of the Institute of Thermology explain, it is necessary to know something about how excessive heat gets into the human body and the body gets rid of it.

Human Body Like Furnace.

In the first place, the body is just like a furnace. Eating is just like burning up fuel. The food is oxidized in the body tissues, producing energy.

But the body is like an engine, too. Just as the boiler and pistons of a locomotive convert heat energy into mechanical energy to keep the wheels going round, so the body converts part of the energy in its food into muscular energy for the performance of work.

Most of us, though, don't turn all the heat energy of the food we eat into muscular energy consumed in exertion. Much of it remains in the form of heat. Physiology tells us that the internal temperature of the healthy body is 98.6 degrees. When, for any reason, it gets above that point, the condition is called fever.

Why aren't we always "burning up in a fever?" For, of course, we generate far more heat than is required for the work we do and to keep the body at its normal temperature. The reason is that the human body has the remarkable faculty of controlling its own temperature, just as a thermostat automatically controls the temperature of a house, school or other building.

Body Throws Off Heat.

Thermostats are instruments placed on the walls of rooms, each one so adjusted that, when the temperature falls to a certain point, an electric current is sent to a motor down in the basement. This then operates a simple mechanism to open the draft door of the heating plant. When the temperature of the room upstairs gets back to the required point, the mechanism shuts off the draft. In closely similar manner, the Holland Institute of Thermology explains, the body controls its own temperature. This is done through four safety valves.

One of these is radiation. The body just throws off its excessive heat to surrounding objects. But during extreme hot weather, this safety valve won't work. For then the surrounding objects are just as warm as the body itself; so they can't absorb any of its heat.

Conduction is the second, but least important, outlet for excessive heat. Conducted heat is the kind that passes from one thing to another by direct contact, just as electricity is conducted along a copper wire. Conducted heat is a small factor in air conditioning engineering because ordinarily only a small part of our body surfaces—just the soles of our feet when we stand—are in contact with other objects or substances.

Heat Carried Off by Air.

But one of the most important safety valves is the third, convection. Convected heat is conveyed by the atmosphere. If the air is cooler than your body, it brushes some of the heat off your body and carries it away. But if the air is warmer than your body, it carries heat to you and helps to warm you. If body temperature and air temperature are the same, there is no heat exchange between them.

So there are conditions in which these three safety valves can't operate to release the execessive heat generated in the body. These are the extreme summer conditions which we call "stifling" and "sweltering," when all the objects surrounding the body are too warm to absorb its radiant heat and the air is too warm to convey any of its heat away. What can happen to serve as an emergency valve?

As a matter of fact, what does happen? The body perspires, and the sweat is evaporated. Now, one of the basic principles of physics is that evaporation causes coolness. So perspiration really is one of the important heat regulating functions of the body. It is one of the most efficient safety valves for the escape of excessive warmth. Anything that promotes the evaporation of perspiration is a great aid to comfort.

Humidity Important Factor.

Of course, the relative humidity of the air has much to do with this. When the relative humidity is high, when the weather is "muggy" as well as warm, that we complain, "It isn't the heat; it's the humidity," the air contains so much moisture obtained from other sources that it can't absorb much heat from the skin.

That's the condition when the humidity is high and the air is stagnant. But suppose that the air isn't stagnant, but is moving past and around the body with a lively velocity. Whenever a particle of moisture is taken from the body, it will be borne away quickly and more air will come along to repeat the process. So the air's movement will give us relief by increasing evaporation.

In Ancient Days the Punkah Gave Relief From the Heat.

Air motion, moreover, is the chief thing that aids convection. Of course, when the air is hot and moving rapidly, it conveys heat to the body rather than from it. But conditions seldom are so severe that this occurs. Usually, air motion, with a temperature even slightly below that of the body, is helpful.

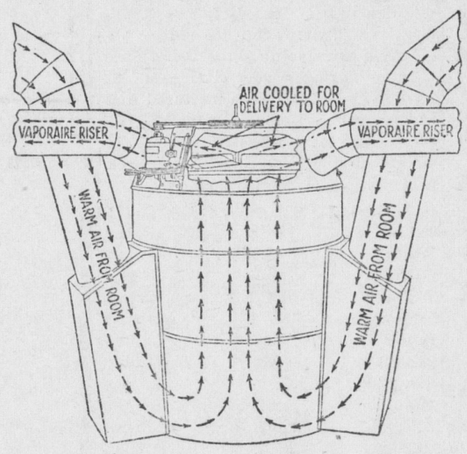
So we see that radiation, convection and evaporation are the body's three great safety valves, that conduction is a minor one, and that air motion is a factor that influences two of them. All present-day air conditioning engineering, the Holland Institute of Thermology states, is based on these facts of physiology.

Moving Air Brings Coolness.

In fact, one of the basic principles of this branch of science, as given in the engineers' "Guide Book" is that "Air motion makes any moderate condition feel cooler." One of the technical men who aided in the twelve years of research that ascertained these facts put it this way: "Air motion exerts a cooling effect on the human body in atmospheres where the temperature is less than that of the body."

This principle is applied in many industrial plants to improve working conditions. In two English tinplate factories through which the air was driven at moderate velocity, the production during hot weather was found to be 12 per cent higher than in two other similar mills that were unventilated. On Atlantic liners, the temperature in engine rooms has actually been reduced from 150 to 70 degrees by means of air motion.

Similar effects have been obtained in American industries. Forced air blasts have been introduced to blow air over the heads of the workers.



Electrified Propeller Unit Speeds the Velocity of Air Through Heating Plant to Produce Summer Cooling and Enhance Winter Heating.

Such a system greatly lowered the temperature and improved the summer-time efficiency in a tube plant in Pittsburgh. Its use also has been effectual in overcoming adverse heat conditions in bottle works and tinplate factories.

Heating System Used for Cooling.

If mere air motion proves such a mighty comfort producer in industrial buildings, why can't it also be used for the same purpose in homes? It can, the engineers of the Holland Institute reply; and that is precisely what has been done by the leaders of the warm air heating industry. They have converted the home heating system from a one-season affair into an all-year-round air conditioning system, which circulates cooling breezes through the home during summer as well as currents of warmth in the winter.

Taking the modern "vaporaire" heating system as the basis of their operations, these air conditioning experts built into it a noiseless electrified propeller unit, of which the function is to speed up the circulation of air through the home to a much higher velocity than the ordinary warm air circulating plant maintains.

These propellers can be run in summer as well as in winter. During hot weather they keep up a steady motion of air through the room between the grille which in winter is used to introduce warm air and the ventilating grille which is used in cold weather to draw cool air down to the central heating plant.

This means that in every room there is a spot of maximum comfort near the grille. But the velocity of the air as discharged through this opening carries clear across the room until it is finally drawn down to the basement through the ventilating grille.

In winter, too, these propeller units maintain a high velocity of warm air. This improves circulation, shortens the time needed to warm up the house on cold mornings, makes it possible to heat even the rooms farthest from the central heating plant and promotes heating efficiency. It eliminates the costly necessity of "forcing" the heating plant and decreases heat losses from the heater and its pipes into the basement.

Two types of "vaporaire" systems that contribute summer coolness and winter warmth to the home have been devised, the Holland Institute of Thermology reports. One is a complete system intended to be installed in new homes or in others where the heating equipment is obsolete. But also the propeller units can be added to already installed warm air circulating plants if they are in good condition. This is a simple and inexpensive remodeling operation. And furthermore, engineering tests have established that the cost of operating either system for cooling in hot weather is less than a cent an hour.

Buy Seed Carefully

Potato growers are urged to be cautious in buying their supply of 1930 seed from unknown dealers. It is best to obtain seed from dealers of proven reliability. Seconds, grown on the home farm from first year disease-free stock, may be used as seed next year.

The Bulletin is always prompt in the delivery of all printing.

Good Hens Demanded

Breeding, selection, and poultry culture are employed by alert Pennsylvania poultrymen to meet the shifting market demands for poultry and eggs. To carry on heavy production hens must have strong bodies and a good supply of nourishing feeds.

The Mt. Joy Bulletin costs only $1.50 per year.

Plant Flowers Now

Iris can still be planted this month. See that the roots are well spread out and the rhizome fairly covered. Firm the soil well around them but do not allow any manure to come in direct contact with the roots.

Consistent and NOT spasmodic davertising always pays best. Each time you stop advertising, the public thinks you quit business. tf

COMMUNITY FAIR QUITE A SUCCESS

(From Page One)

bethtown; 2nd, Mt. Joy; Eighth, 1st, Mt. Joy; 2nd, Elizabethtown.

Art:—1st, Mt. Joy; 2nd, Elizabethtown.

Airplanes:—1st, No. 1605; 2nd, Linneaus Longenecker; 3rd, Donald Kline.

Potatoes

Russets, 1st, Monroe E. Garber; 2nd, Norman E. Garber; 3rd, Emma Coble; Cobblers, 1st, Elam M. Musser; 2nd, Joseph G. Miller; 3rd, W. K. Livingood; Rose Erin, 1st, Emma Coble; Blue Peerless, 2nd, Mrs. Ed. Staley; Sweets, 1st, E. G. Bard; 2nd, J. G. Miller; 3rd, Monroe E. Garber.

Dried Foods

Dried Apples, 1st, Irene Musser; 2nd, Mrs.. John Kolp; 3rd, Mrs. Jac. Snyder; Dried Corn, 1st, Mrs. Joseph G. Miller; 2nd, Mrs. J. H. Stehman; 3rd Mrs. Benjamin Hess. Dried String Beans, 1st, Matilda Workman; 2nd, Mrs. Benjamin Hess. Lima Beans, 1st, Mrs. Emma Coble; 2nd Mrs. Jacob Zook; 3rd, Mrs. Benjamin Hess. Noodles, 1st Mrs. E. B. Newcomer; 2nd, Mrs. Dan Felker; 3rd, Mrs. Willis Reapsome. Soy Beans, 1st Mrs. Landis Springman; 2nd, Mrs. H. H. Eby, Mt. Joy; 3rd, Mrs. Benjamin Hess.

Jellies and Preserves

Currant, 1st Mrs. Emma Coble; 2nd, Mrs. Daniel Felker. Grapes, 1st, Mrs. Jac. Zook; 2nd, Miss Florence Eby; 3rd Mrs. Emma Coble. Apples, 1st, Miss Myrtle Hiestand; 2nd, Mrs. Mae Hiestand; 3rd, Mrs. S. H. Tressler. Quinces, 1st, Mrs. H. M. Miller; 2nd, Mrs. Daniel Felker. Strawberries, 1st, Margaret Balmer; 2nd Mrs. E. B. Newcomer; 3rd, Miss Myrtle Hiestand. Peaches, 1st, Mrs. Andrew Felker; 2nd, Mrs. Jno. Peiffer; 3rd Mrs. Daniel Felker. Quinces, 1st, Margaret Balmer; 2nd, Mrs. Daniel Felker. Cherry 1st, Mrs. Andrew Felker; 2nd, Mrs. Emma Coble; 3rd, Mrs. Daniel Felker. Apple Butter, 1st, Mrs. J. H. Stehman; 2nd, Mrs. John Peiffer; 3rd Mrs. H. S. Earhart. Pear Butter, 1st, Mrs. Jacob Zook. Quince Butter, 1st Mrs. E. B. Barr. Grape Butter, 1st, Mrs. Jos. Berntheizel; 2nd, Margaret Balmer; 3rd Matilda Workman. Honey, extracted water white, 1st, John S. Eby. Honey extracted, amber 1st, John S. Eby; Comb Honey, 1st, John S. Eby; 2nd John Newcomer.

Canned Goods

Vegetables—1st, Mrs. Landis Greider; 2nd, Mrs. Daniel Felker; 3rd, Mrs. Felker; Fruits, 1st, Mrs. Andrew Felker; 2nd, Mrs. Jac. Zook; Mrs. Daniel Jacob Zook. Greens, 2nd, Mrs. Daniel Felker; Canned Relishes, 1st, Mrs. Daniel Felker; 2nd, Mrs. Andrew Felker; 3rd, Mrs. M. N. Heisey. Ketchup, 1st, Mrs. J. G. Miller; 2nd, Mrs. H. H. Eby; 3rd, Mrs. M. N. Heisey. Tomatoes, 1st, Mrs. John Piefer; 2nd, Mrs. Clyde Eshleman; 3rd, Mrs. Andrew Felker. Green Beans, 1st, Mrs. John Piefer; 2nd, Mrs. Daniel Felker; 3rd, Myrtle Hiestand. Peas, 1st, Irene Musser; 2nd, Mrs. E. P. Eby; Mrs. Jac. Zook. Corn, 1st, J. M. Kolp; 2nd, Lela Coble; 3rd, Mrs. M. S. Potter. Beets, 1st, Vivian Eby; 2nd, Mrs. John Piefer; 3rd, Mrs. Jac. Zook. Carrots, 1st, Mrs. Frank Workman; 2nd, Mrs. Landis Grieder; 3rd, Mrs. Daniel Felker. Asparagus, 1st, Irene Musser; 2nd, Lela Coble; 3rd, Mrs. E. G. Bard. Peaches, 1st, Mrs. H. H. Eby; 2nd, Mrs. E. B. Newcomer; 3rd. Mrs. Andrew Felker. Pears, 1st, Mrs. John Piefer; 2nd, Mrs. Andrew Felker; 3rd, Mrs. H. B. Keller. Blackberries, 1st, Mrs. H. H. Eby; 2nd, Mrs. Jacob Zook; 3rd, Mrs. Frank Workman. Raspberries, 1st, Mrs. E. P. Eby; 2nd, Mrs. H. H. Eby. Plums, 1st, Mrs. H. H. Eby; 2nd, Mrs. Landis Springman. Sweet Cherries, (yellow whole), 1st, Mrs. E. G. Bard; 2nd, Mrs. Andrew Felker; 3rd, Mrs. Nora Greiner. Sweet Cherries, (red), 1st Mrs. H. B. Arntz; 2nd, Mrs. Willis Reapson; 3rd, Mrs. Ed. Staley. Sour Cherries, 1st, Mrs. H. H. Eby; 2nd, Mrs. J. M. Kolp; 3rd, Mrs. H. B. Keller. Quinces, 1st, Mrs. Andrew Felker; 2nd, Matilda Workman.

Fruits

Quince—1st, C. K. Stauffer; 2nd, C. N. Hershey; 3rd, J. S. Kendig. Apples--Baldwin, 1st, Masonic Homes 2nd, Amos Shank; 3rd, Mrs. Earl Albright; Ben Davis, 2nd, Amos Shenk; Blacktwig—1st, Amos Shenk; 2nd, C. Bear; 3rd, S. H. Tressler; Winter Banana—1st, Mabel Heisey; 2nd, Elmer Snyder; 3rd, C. Bear; Dominee—1st, Masonic Homes; 2nd C. R. Farmer; Stack—1st, C. R. Farmer; Stayman Winesap—1st, Masonic Home; 2nd, Elmer Snyder; 3rd, J. B. Witter; Winesap—1st, Mable Heisey; York—1st, C. R. Farmer; 2nd Elmer Snyder; 3rd, Mabel Heisey; Sweet—1st, Masonic Homes; King—1st, Mabel Heisey; Pewaukee—2nd, Amos Shenk; Rome—1st, Masonic Home; 2nd, Elmer Snyder; 3rd, J. B. Witter; Russet—1st, H. S. Nolt; 2nd, Amos Shenk; 3rd, C. R. Snyder 2nd, H. S. Nolt; 3rd, Masonic Homes; Smith Cider—1st, C. R. Farmer; 2nd J. S. Kendig; 3rd S. H. Tressler; Summer Rambo—2nd, Masonic Homes.

Special Grimes, Ribbon, C. K. Stauffer. Pears—1st, Mildred Eby; 2nd, Raymond Zook; 3rd, Mrs. J. H. Stehman. Black Grapes—1st, E. B. Newcomer; 2nd, Martin Gross; Golden Delicious—1st, H. S. Nolt; 2nd, Elmer Snyder; Grimes—1st, C. K. Stauffer; 2nd, H. S. Nolt; 3rd, Masonic Homes; Fallwater—1st, Masonic Home; Bell Flower—2nd, C. R. Farmer; 3rd, Mabel Heisey; Delicious—1st, H. S. Nolt; 2nd, Masonic Home; 3rd, Elmer Snyder; Jonathan—1st, H. S. Nolt; 2nd, Masonic Home; 3rd, J. B. Witters; Jeffries—2nd, H. S. Nolt; King David—1st, H. S. Nolt; 2nd, Masonic Home; McIntosh—1st, H. S. Nolt, 2nd Elmer Snyder; 3rd, Mabel Heisey; Paragon--1st, Masonic Home; 2nd, Elmer Snyder; Northern Spy—1st, Elmer Snyder; 2nd, H. H. Kreider; Opalescent—2nd, Fred Baker; White Grapes—1st, Matilda Workman; 2nd, Martin Gross; 3rd, C. S. Martin.

Corn

Sure Crop, 10 ears—1st, Park Garber; 2nd Masonic Homes; 3rd, Henry Miller, Jr., Yellow Dent, 10 ears—1st, Ray Strickler; 2nd, N. Bender; 3rd, Levi Brubaker, Yellow Dent, 30 ear class—1st, Ray Strickler; 2nd, Norman Bender; White Cap, 10 ear class 1st, J. Earl Brubaker; White Cap, 30 ear class—2nd, J. Earl Brubaker; Sweet Corn, 10 ear class—1st, N. E. Garber; 2nd, Emerson Rohrer; 3rd, Willis Reapsome; Pop Corn, ten ear class, 1st, Henry Eby; 2nd, Emerson Rohrer, 3rd, Dudley Sipe; Best single ear—1st, J. C. Garber; Longest ear—1st, Masonic Homes, Sure Crop; 30 ear class—1st, Park Garber; 2nd, Henry Miller; 3rd, Masonic Homes.

Vegetables

Cabbage—1st, Emerson Rohrer; 2nd, Mary Shearer; 3rd, Jno. Peifer Cauliflower—1st, Will Livingood; 2nd, E. Rohrer; 3rd, Mrs. A. S. Brandt. Squash—1st, John Peifer; 2nd, E. Rohrer; 3rd, Mrs. B. K. Hess. Egg plant—1st, H. C. Ney; 2nd, Wm. Livingood; 3rd, Mrs. Salome Musser. Cohbrabi—1st, Wm. Livingood. Beans, Yellow—1st, E. Rohrer; 2nd, Jac. Snyder. Spinach, —1st, Emerson Rohrer; 2nd, Mrs. Dan Felker; 3rd, Wm. Diffenderfer. Celery—1st, Emerson Rohrer; 2nd, J. G. Miller; 3rd, Abraham Hostetter. Long Neck Pumpkin—1st, George W. Myers; 2nd, S. H. Tressler; 3rd, Mae G. Nissly; Barrel Pumpkin—1st ,John L. Cassel; 2nd, Amos Wolfe; 3rd, Harvey Kaylor. Field Pumpkin—1st, Joe G. Miller; 2nd, Mrs. B. K. Hess; 3rd, A. Heisey. Sunflower—1st, E. Rohrer; 2nd Mrs. Dan Felker. Swiss Chard—1st, E. Rohrer; 2nd, Wm. Livingood; 3rd Mrs. B. K. Hess. Gourd—1st, Emerson Rohrer. Lettuce—1st, E. Rohrer; 2nd, Mrs. Jac. Zook; 3rd, Joe Snyder; Endive Broad—1st, Joe Snyder; 2nd, C. D. Wittle; 3rd, Mrs. Dan Felker. Endive Curley—1st, Mrs. Esther Musser; 2nd, Emerson Rohrer; 3rd, Masonic Homes. Turnip—1st, Elam Musser; 2nd, Arthur Schneider; 3rd, Mowery Frey. Radishes—1st, E. Rohrer; 2nd, Mrs. Paul Haines; 3rd, Wm. Livingood. Carrots—1st, J. G. Miller; 2nd, E. Rohrer; 3rd, Mowery Frey. Parsnips—1st, E. Rohrer; 2nd, Mrs. Henry Eby. Salisfy —1st, Mrs. Henry Eby; 2nd, Wm. Livingood; 3rd, E. Rohrer. Beets —1st, Mrs Henry Eby; 2nd, John Kolp; 3rd, Wm. Livingood. Beans Green String—1st, C. K. Stauffer; 2nd, E. Rohrer; 3rd, John Peifer. Lima Beans—1st, E. Rohrer. Peppers—1st, Wm. Livingood; 2nd, Mrs. Jac. Zook; 3rd, Mrs. Harry Albright. Tomatoes—1st, Emerson Rohrer. Onions, Yellow—Matilda Workman; 2nd, Mae G. Nissley; 3rd Mrs. D. C. Witmer. Onions, White —1st, Allen Coble; 2nd, E. Rohrer 3rd, Mrs. Dan Felker.

Wheat

1st, E. B. Newcomer; 2nd, Paul Musser; 3rd, Frank M. Workman.

Eggs White—1st, Robert S. Mason; 2nd, N. N. Baer; 3rd, Mrs. Katie Foreman. Eggs, Brown—1st, John Peifer; 2nd, Wm. Livingood; 3rd, Jacob Zook. Tobacco Filler; 1st, Ben Hess; 2nd, J. Earl Brubaker; 3rd, Hoffer Kaylor. Binder —1st, Burneel Gavel; 2nd, C. Emerson Rohrer; 3rd, Harry Zerphey.

Rural School: Drawing—1st, C. E. Rohrer, Lincoln School; 2nd, Dorothy Garber; Garfield School: 3rd, Carrie Smith. Washington School, Bird Houses, Airplanes and Furniture received ribbons.

Baked Goods

Angel Food—1st, Ella Longenecker; 2nd, Mrs. Jacob Ober; 3rd, Ruth Charles. Sponge—2nd, Fanny Heisey; 3rd, Mrs. Jacob Ober. Butter Cake—1st, Fanny Heisey. Special—3rd, Ethel Garber. Choeolate—1st, Mrs. H. S. Earhart; 2nd Mary Reist; 3rd, Mrs. H. B. Keller. Sugar Cookies—1st, Mrs. Dan Felker; 2nd, Mrs. John Kolp; 3rd, Ethel Garber. Hermits—1st, Estella Coble; 2nd, Mrs. Frank Workman; 3rd, Mrs. Henry Eby. Oatmeal—1st, Mrs. D. C. Witmer. 2nd Mrs. Henry Eby; 3rd, Estella Coble. Molasses—1st, Mrs. Grosh; 2nd, Mrs. Staley; 3rd, Mrs. Joe Bernthizel. Chocolate — 1st, Mrs. Henry Eby; 2nd, Mrs. Dan Felker. 3rd, Matilda Workman. Two Crust Pie—1st, Mrs. Dan Felker; 2nd, Mrs. John Kolp; 3rd, Mrs. S. H. Miller. Pumpkin—1st, Mrs. Willis Reapsome; 2nd, Mrs. Felker. 3rd, Mrs. John Kolp. Bread—Mrs. Amos Bortzfield. Buns—1st, Mary Reist.

Soap—Boiled: 1st, Mrs. Jacob Miller; 2nd, Mrs. O. S. Lenhard; 3rd, Mrs. Jacob Zook. Soap Cold 1st, Mrs. Amos Shelly; 2nd, Mrs. Dan Felker; 3rd, Mrs. Andrew Felker.

Girls 4-H Canning Club: Best Display, 16—1st, Miss Lois Garber; 2nd, Miss Vivian Eby; 3rd, Miss Kathryn Garber.

Poultry

Barred Rocks—1st, Cock, Amos B. Wolf; 1st, Ckl., 2nd, 4th, Pullet; Fred Lancaster; 2nd, Ckl., 1st, 3rd, Pullet, 1st, Pen, N. N. Baer. Buff Rocks—1st, Hen, 1st, 2nd, 3rd Pullet, H. H. Strickler. S. C. R. Reds—1st, Hen, S. B. Mason; 1st, 2nd, Ckl., 1st, Pullet, Joe Witmer. Partridge Wyandotte—1st, Hen, S.

(Turn to Page 4)