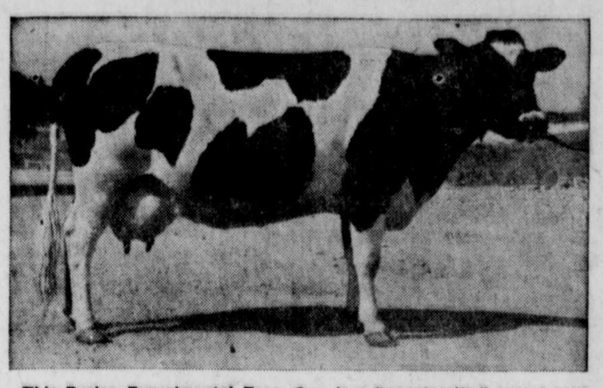
Farm Stock "Monstrosities," Agricultural Expert Believes



This Purina Experimental Farm Cow is a "monstrosity," expert says. Her present lifetime record is 112,000 lbs. milk.

Compared with the wild herds from which our present cattle are descended, the cow of today is almost as much of a monstrosity as if she had six legs, claims E. B. Powell, Manager, Purina Experimental Farm, Gray Summit, Missouri.

"By nature, a cow is supposed to give just enough milk to give her calf a good start in life—possibly not more than a thousand pounds a year," he explains. "And the jungle fowl of India is supposed to lay just enough eggs to hatch out her chicks. And a wild hog is supposed to weigh around 200 pounds at 1½ to 2 years, not much of which meat is edible.

"But today's cow is expected to give better than 9000 pounds of milk annually. Today's hen is expected to lay from 200 to 300 eggs each year. Today's hog is expected to weight over 200 pounds at six months. It's figures like these that make our present day farm animals 'monstrosities,'" according to Powell.

Feed Requirements Change

Because of the physical changes which livestock and poultry have undergone to get the high production demanded of them, they require feeds far different from those on which they were able to exist in their natural or primitive state, Mr. Powell points out.

"The primitive cow was able to produce enough milk for her offspring from wild pasture, but even on good pasture or hay today's potential 10,000 pound cow will lose flesh and fall off in production. Along with her pasture or hay she must have a balanced grain ration if she is to hold up in flesh and produce to her best," he asserts.

"Farm grains alone are not enough," Powell says. "A cow needs balanced amounts of carbohydrates, proteins, minerals, fats and vitamins to produce milk abundantly.

"For that reason we have developed at the Purina Experimental Farm and in our Purina Laboratories mixed concentrates containing what grains lack to produce milk in large quantities. Blended with home grown grains, these mixed concentrates give the cow a balanced ration for making milk and maintaining her body."

The same is true of other types of livestock, according to Powell. For example, he says, it takes 10 to 12 bushels of corn to put 100 pounds of pork on a hog when the corn is fed alone. However, by adding more proteins, more minerals, and more variety to keep the appetite keen, the same pig will put on 100 pounds of pork with 5½ to 6 bushels of corn and 40 to 60 pounds of mixed concentrates.

He goes on to say that although it looks like getting by cheaply to let a hen roam the fields rustling for whatever she can find, just as her jungle ancestors did, it's actually expensive because she won't lay enough eggs to make her profitable.

Mixed Concentrates Scientifically Made

"Science, which by breeding and selection produced our present-day farm animals, has been just as busy developing feeds that will meet their changed needs," Powell says. "As a result, today's farmer has his choice of many mixed concentrates to blend with their home grown grains that are made by reputable, nationally known manufacturers."

Bell Laboratories Play Important Part In Progress Of World Science

Talking Pictures, Television And Transmission Of Photos By Wire Cited As Outstanding Discoveries Of Research Organization

Sixty-five years ago there was no telephone, but there was a telephone laboratory. In a corner of a Boston workshop Alexander Graham Bell was investigating speech and hearing and was devising apparatus and methods for the electrical communication of intelligence. The outgrowth of these laboratory experiments was the telephone and the world-wide system we have today.

From two men—Bell and Thomas A. Watson—the telephone laboratory personnel has grown to thousands; from a small space to large buildings; from simple tools to the complete equipment which modern scientific progress has made possible.

A review of the activities of the Bell Telephone Laboratories, research organization of the Bell Telephone System, for the past fifteen years shows that in 1925 your neighborhood movie theatre was a palace of silence. The Laboratories were responsible for the talking motion picture. The Bell System served, directly, about half as many telephones as today. Long distance calls totaled half the present number and were much costlier. Radio network broadcasting hadn't approached its present dimensions. The first commercial transatlantic radiotelephone call was yet to be made. Air mail pilots were bumping along in the clouds, but operation of luxury passenger airliners in constant communication with ground forces was a job for a later date.

Among Bell Laboratories discoveries was the transmission of pictures, announced by the Bell System in 1925, and which has had such a profound effect on journalistic methods. In 1926 two-way transatlantic radiotelephony became a fact. A year later, the first commercial transatlantic call was made to London. That infant scientific marvel, television, also was announced in 1927. Later came aircraft radio development, which has been so important in the evolution of this newest branch of the transportation industry. At about the same time came ship-to-shore and coastwise radiotelephone service for all kinds of craft—from ocean liners to fishing boats. The Bell Telephone Laboratories were literally taking telephone service to land, sea and air.

Still another of the accomplishments in which the Laboratories has played an important part, has been the extension and growth of teletypewriter service. Aeronautical authorities and police have found teletypewriter networks particularly useful in their activities.

The developments of the Bell Telephone Laboratories which relate to ordinary telephone service have been just as significant, if not as spectacular as those previously mentioned. For example, there have been many new types of power plant equipment, some of it made necessary by other laboratories' inventions such as the coaxial cable and carrier systems.

Such a record made in the relatively short time of fifteen years is striking proof of the tremendously significant part played by the Bell Telephone Laboratories in the development, improvement and expansion of the nation's telephone industry, and in the world of science in general.

MODERN GREEK AMAZONS TERROR OF ITALIANS

How modern Greek women, like the celebrated woman warriors of their ancient legends, know neither fear nor mercy when in battle. A timely article by a celebrated world-traveler in the February 2nd issue of

THE AMERICAN WEEKLY

the big magazine distributed with the BALTIMORE SUNDAY AMERICAN

Carrying on the tradition started by their grandfather, the five sons of John D. Rochefeller, Jr., have pooled their philanthropic activities in a new corporation called the Rockefeller Brothers Fund.

A. & P. MILITARY SERVICE MEN

Great Atlantic and Pacific Tea Company announces that employes entering the United States military service will receive from the company 20 pr cent of their wages, up to a maximum payment of $100 a month, for a full year. The company states it also will pay such employes' group life insurance premiums for the one-year period.

Even the troubles of a pretty woman are interesting only the first time they are told.

Automobiles and bombers teach us that man is capable of making machines before he is mature enough to be trusted with them.

The Checkerboard Trade Mark Had a Very Simple Start

Often we've been attracted by that popular Checkerboard trade mark that is a part of the sign identifying one of our local feed stores and on the bags and containers in which its feeds, concentrates and sanitation products are packed. But how did it get started?

You're wrong if you've guessed it was so the bags could be used for playing a game of checkers out in the barn on a rainy day. According to William H. Danforth, founder of Purina Mills, their checkerboard trademark had a simple, yet rather amusing, beginning.

Wm. H. Danforth, founder of the checkerboard trade mark.

It was a boyhood experience that gave Mr. Danforth his checkerboard idea. When a boy he waited on customers in his father's general store in southeastern Missouri. There he learned many valuable lessons that were to serve him well in his business career. "But the most important thing I learned behind the counter in that country store where we sold everything from linen handkerchiefs to horse collars, was this," Danforth smilingly recalls — "I learned the importance of 'dress.' And I learned that lesson from the mother of a large family in our community.

"Among the many articles we handled in our store was 'bolt goods,' mostly old-fashioned calicos and sturdy ginghams. Along in the spring of the year business picked up in this line of goods. Customers swarmed into the store to buy dress materials. Usually they purchased enough material to outfit the whole family. From the same bolt would be made shirts for the father and all the boys, and dresses and aprons for all the girls. Most of the women who traded with us chose modest patterns and varied them from year to year. But not Mrs. Brown. Mother of a large brood of tow-headed boys and girls of all ages, Mrs. Brown had one invariable choice in spring material. In all the time she traded with us she didn't, so long as I remember, swerve from her standard. She always bought a bolt of heavy red-checked gingham. You can imagine the appearance of the Brown family when they came out in their new spring wardrobe," Danforth recounts.

"Mrs. Brown headed the crew bedecked in her red-checked dress. Mr. Brown supported her with a red checkerboard shirt. And through the whole family the design was repeated—red-checked dresses for every girl, red-checked shirts for the boys.

"It was a striking appearance this family made. They were conspicuous from afar. Other mothers might temporarily lose sight of a child or two at an ice cream social or a basket-dinner. But not Mrs. Brown. She could spot a Brown offspring in any crowd. And so could everyone else.

"Before long the Brown family in that community became indelibly associated with red checkerboard gingham," Danforth says, "and from that family I learned that **to make a thing stand out you have to dress it to fit the part.** And I also learned that dressing alike gives a unity and identification lacking in helter-skelter design."

Years later when Danforth, fresh from college campus, decided to enter the feed manufacturing business, he remembered how a Brown was never mistaken for anyone else in the community. So he decided to dress his products so they would never be confused with those made by others. Thus was born the checkerboard trademark that, through 47 years, has increasingly gained popularity, and is a part of the sign that identifies our local feed store that handles checkerboard feeds, concentrates, and sanitation products.

HOW MUCH TIME DO YOU WASTE?

Well known quiz expert, in an unusual feature, enables women through self-analysis to find out if she makes the most of her time. Don't miss this feature in the February 2nd issue of

THE AMERICAN WEEKLY

the big magazine distributed with the BALTIMORE SUNDAY AMERICAN

Nice new slogan: "Billions for defense, but not one cent for profiteers."

With the exception of success some people willingly forgive anything in a friend.

An Unholy Trio!

HAVING studied history carefully and then checked their findings against what's going on in our nation today, the temperance forces lump beer, wine and distilled spirits together when they speak of alcoholic beverages.

"It's not the taste nor the label on the bottle which creates the alcohol problem," these welfare-conscious leaders declare. "It's the alcohol in the drink and it's alcohol the drinker is after, whether he takes it in beer, wine, or whisky."

Neither beer nor wine is a beverage of moderation, they contend, pointing out that both have a long record for creating the alcoholic habit and a bodily demand for more and then more alcohol. They also point out that beer, for instance, is the drink which frequently introduces youth to alcoholism, not only causing drunkenness itself but inducing the use of stronger drinks.

The Judge Knows!

"Boys and girls, children, men and women are drinking as they never drank before," declared District Judge J. E. Haycraft at Jackson, Minn., in sentencing Paul Poelaert for the murder of his mother, wife, and two babies. "I hope those who worked so hard to restore this curse are satisfied."

Tit for Tat

Said the bottle to the boy,
Said the bottle, sly and coy,
"I'll tell you what we'll do;
You catch me—then I'll catch you!"

Jane Barleycorn

"There was a 90 per cent increase in women alcoholic patients for the first 11 months of 1938 as compared with the same period of 1933," said Martin Nelson, secretary of the Keeley Institute, the drink cure at Dwight, Ill., in a press interview. Think that over!

The Hostess

Angelo Patri says: "It is not necessary to serve cocktails at a young persons' party. The fruit drinks that can be made are delightful in color and fragrance and taste. Young people enjoy them.

"Nowadays most of the young people arrive at a party in cars. The boy who drives the car must not drink . . . The hostess who offers drinks (alcoholic) to young people who are to drive cars afterward takes a grave responsibility on her conscience."

BELL LAB SCIENTISTS DEVELOP NEW SUPER CALCULATING MACHINE

Arithmetic Made Easy by Device Constructed of Standard Telephone Apparatus

An electrical super calculating machine recently has been developed by the Bell Telephone Laboratories to expedite the extended calculations required in the design of electrical filters and networks, and in the solution of other circuit problems.

An operator sits at the keyboard of the new electric calculating machine, the only one of its kind in the world.

Calculating machines of various kinds are familiar equipment in banks and offices, but the new machine differs radically from them not only in appearance and principles of operation, but also in that it performs complicated calculations and returns the answer in written form without any attention on the part of the operator other than writing out the problem on a set of typewriter keys. It is constructed entirely of standard telephone apparatus, using for its computing elements relays and crossbar switches such as are used to connect subscribers in the most modern type of dial exchange.

There is only one of these calculating machines in existence. It is installed in a small room in the Bell Telephone Laboratories in New York City. One need not go to this room to use the machine, however. Instead, the operator sits at a teletypewriter, which may be located at any convenient place, and presses keys to record the numbers and to indicate what operations are to be performed.

This machine recently was demonstrated by its inventor, Dr. G. R. Stibitz, before a meeting of the American Mathematical Society at Hanover, N. H.

People will arise and put an end to crime when they understand that all losses are added to the price they pay.

Your Family Too!

HYPOCRITICAL parents make for skeptical children.

That statement not only refers to the neighbor's children, but to your own! When the intelligent leaders of our citizenry talk about juvenile crime, or about the effects of taverns and liquor on 'teen age youngsters, many parents read it as just so many words, instead of stopping to remember that such facts may hit home in their own family!

A poll of 22,000 youths throughout the United States on the question of whether drinking of alcoholic beverages is a serious evil among young persons resulted in an affirmative response by a ratio of approximately four to one. The questionnaire was sent by the Rev. Daniel Lord, S. J., editor of the Queen's Work, young people's magazine, according to a press wire service report from St. Louis.

Six positive steps recently were listed by Mrs. Ida B. Wise Smith, president of National W. C. T. U., for parents who want to keep boys and girls out of saloons and taverns.

The list of "do's" included:

1. Set a sober example.

2. Urge youth to participate in healthful sports.

3. Help youth to have a social good time in non-alcoholic surroundings and to know that alcohol never changed a wallflower into a glamour girl.

4. Convince youth that a drink never helped a boy or girl to get or hold a job.

5. Help strengthen youth spiritually as religious conviction is the strongest basis for temperate living.

6. By regulatory or prohibitory laws help to remove the easy accessibility of present-day liquor.

Youth wants a place to congregate and have a good time. Repeal took young people from the corner drug store to the tavern. During 1940 though there was recorded a strong move by youth itself to get out of tavern surroundings by endorsement of dairy, fruit juice and soft drink bars, of liquorless night clubs, and non-alcoholic curb service stands.

Studying the highway slaughter of youths each year—with a large percentage due to drinking—Mrs. Smith appealed to girls to safeguard themselves and their friends by refusing to get in a car if the driver had had even one drink.

COLORS GUIDE TELEPHONE REPAIRMEN IN SPLICING INTRICATE CABLE WIRES

If you want to be an installer or repairman of telephone switchboard cable, it might be wise to make certain you aren't color blind because colors play an important part in this job of maintaining equipment. Each of the hundreds, sometimes thousands, of wire circuits in the cable has its individual color or combination of colors in the insulation about the wires. These colors give the wire experts ready visual means of distinguishing one line from another. In addition, electrical tests make absolutely certain that the wires are in the right places.

According to the color code, used by telephone forces in all parts of the world, the circuits in the cable are indicated from the center outward by combinations of blue, orange, green, brown and slate, in that sequence. With these colors, however, three others—white, red and black—are used in that order to form the many combinations that may be used to distinguish the multitude of wires in a particular cable.

Some 339 of these combinations, for example, are used in Bell System switchboard cables of various sizes made by the Western Electric Company, manufacturing and supply organization of the system. Switchboard cable, of course, is but one of many types made by the company for connecting central offices, subscriber lines and long distance points.

A. T. & T. ANNUAL REPORT MAILED TO INVESTORS IN ALL PARTS OF THE WORLD

The annual report of the American Telephone and Telegraph Company, whose stockholders total about 635,000, really gets around the country.

Recent figures show that about 99 out of every 100 copies of the last report were delivered from the 40,000 post offices in the United States. However, to reach the 1 per cent of stockholders who live abroad, copies were sent to 5 other countries in North America, 17 in Central America and the West Indies, 8 in South America, 29 in Europe, 6 in Africa, and 16 in Asia and Oceania.

Among the places to which reports were sent were such out-of-the-way spots as the Azores, Isle of Man, Kaima, Latvia, Luxembourg, Malta, Maroc, Moaco, Salvador, Seychelles Islands, Straits Settlements and Tahiti.

The tongue of a woman is her sword—and she never allows it to rust.

The first sign of age is to gaze at the fascinating things in store windows and not want any of them.

Flood of Questions Asked About South America

Shut off from trade and travel in Europe, Middlewesterners are turning their attention in an amazing degree to Latin-American countries, to a study of their culture, art, and background, and to the prospects for travel, and even indefinite stays, according to findings of the Pan American council here.

The council, which established headquarters in Chicago, has been deluged with inquiries of all kinds, declared the president, Mrs. Robert S. Platt.

People are asking about travel, about the advisability of moving to some South American country to make greater use of technical training in dairying, metallurgy, or manufacture, about Latin-American art or music, or politics, about lecturers and speakers who can give an evening's program, about crafts, textiles, and paintings they might exhibit, about music and literature.

The council is not only a clearing house for Latin-American information for Chicagoans, Mrs. Platt emphasized, but also a kind of focal point for about eight Latin-American organizations, including the Friends of Mexico, Institute de las Espanas, Mesa Espanola, Good Neighbor Forums of the Y. M. C. A. college, and Spanish clubs in Northwestern university and the University of Chicago.

Letters and telephone calls ask, "Can you give us the name of an importer of rubber in South America?" "Does Germany or Uruguay control the salvage rights of the Admiral Graf Spee?" "Which country has that large public works program pending?" "How much American money was invested in Latin-American countries in 1939?"

To assist in disseminating information the council, young as it is, is already putting out a bi-monthly bulletin announcing a calendar of film showings, orchestra concerts, panel discussions, exhibits, language classes and other scheduled events all having to do with Latin-American relations.

Lillian Gish, Dancer, Started With Bernhardt

Lillian Gish—dancer.

That would be surprising billing, indeed, for the actress who has long been accounted an international dramatic star of stage and screen.

Yet it was as a dancer that the fragile beauty made her debut on Broadway. And with Sarah Bernhardt, at that.

Miss Gish was but seven at the time, and Sarah was well past 60, though tall and striking in appearance.

"How thrilled I was," Miss Gish recalls.

"Bernhardt selected me for the part of the child dancer after visiting a dancing school I attended.

"Each night as she stood in the wings, preparing to make her entrance, Bernhardt would pat me on the head. It became quite a little rite between us, and I thought of it suddenly the other night for the first time in years when I found myself patting little Harlan Stone on the head as we stood in the wings before the first act curtain of 'Life With Father.'"

Looking Back to Kitty Hawk

Whether Orville and Wilbur Wright, who realized Roger Bacon's prophecy and Leonardo da Vinci's dream, ever foresaw the sky full of Messerschmitts, Heinkels, Spitfires, Airacobras and the like—is a question that some expert in the short history of aviation may answer if he can. If they did the world today possibly wishes they had folded their tents at Kitty Hawk and bicycled back to Dayton before 10 o'clock on the morning of December 17, 1903.

Be that as it may, it is certain that they did not foresee an encyclopedia of the airplane of more than 1,400 pages less than 37 years after their world-shaking flight. Yet here it is this day, an item at least half as bulky as an unabridged dictionary, and named "Aerosphere: 1939." The author and editor is Glen D. Angle of Detroit, who is known as an engine designer and as the author of various books and many technical articles relating to airplane engines. He was formerly a professor at the Lawrence Institute of Technology, and is now connected with the Briggs Manufacturing company.

Big League Games Indoors

Huge sports stadia of the future in which major league baseball teams will play under roofs and with indirect lighting, rain or shine, are predicted by Robert J. Swackhamer, G-E engineer. Such stadia might be built in the next 10 or 15 years, he believes.

Admitting that the idea seems radical, Mr. Swackhamer points out that baseball was scoffed at in the early stages of its development at Lynn, Mass., but now night baseball is being played by 75 per cent of the clubs in organized baseball. Swackhamer, who designed the lighting for the fields of the Cincinnati Reds, Brooklyn Dodgers, and Cleveland Indians, recalled how his proposal of night ball in the majors was ridiculed at one time.

The indirect illumination of such stadia probably would be accomplished by projecting the light, from concealed locations below the roof, to the ceiling of the stadium where it would be reflected downward to the playing and seating areas.