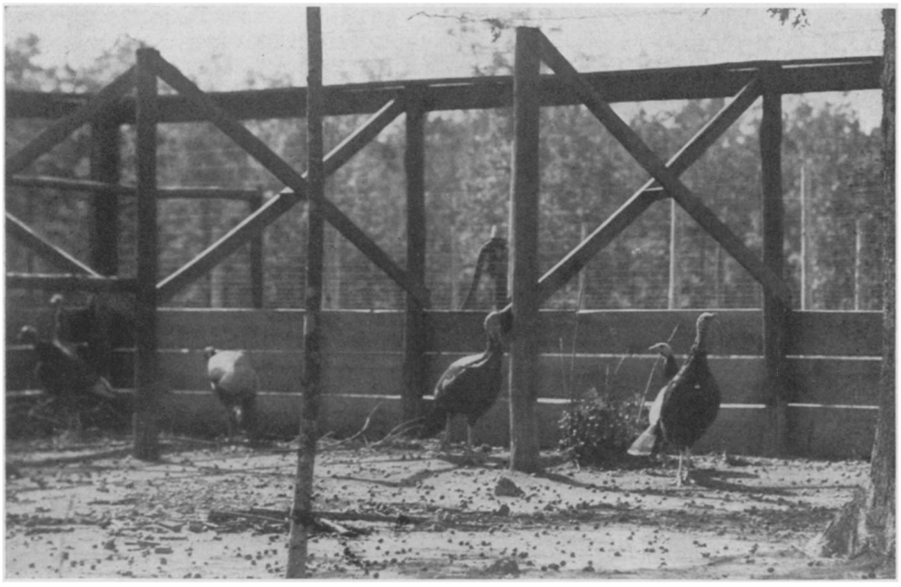

FIRST THANKSGIVING DINNER

Some of the few remaining representatives of the shy wild turkeys that were once hunted by the Pilgrim Fathers. Now, paradoxically, they must be carefully penned up to keep them wild.

CONSERVATION

Wild Turkeys, Nearly Extinct, Penned to Keep Them Wild

Captured Wild Birds Pine Away in Confinement So Specimens Were Obtained While in the Egg Stage

TURKEYS of the true North American wild species, such as supplied the first Thanksgiving feast, may some day abound again in Eastern woods, if a careful and ambitious breeding project now under way at Winewood, Va., succeeds.

For it must be realized that the holiday turkeys we buy in the market-place are not simply the old native species captured and tamed into barnyard fowls. The common domestic turkey, though closely related to the original wild turkey, is as much an immigrant as chickens and ducks and geese. Although it originated in Mexico, it came to the United States by way of Europe, having reached England through a very roundabout chain of trade from Spain.

Wild Turkey Virtually Extinct

In the meantime, our own wild turkey has become virtually extinct. Either it has been wiped out by hunters or, where wild birds survive, it has been mixed with domestic stock that has escaped from farmyards and taken to life in the open again.

But now, in an area in Virginia's historic Wilderness, where Grant and Lee once locked forces in the bitterest fighting of the Civil War, a serious effort is being made to bring the old wild turkey back. And, paradoxically enough, it proves necessary to put him inside a fence to keep him "wild."

1,200-Acre Bird Preserve

About seven years ago W. E. Wine, the present owner of Winewood, became interested in locating a place where the wild turkey could be found and preserved. At first it seemed that the Wilderness area of Virginia still had some of the pure strain wild turkeys left, so Mr. Wine purchased about 1,200 acres of timber land there and had elaborate pens and feeding sheds constructed.

When these arrangements were all completed, the keeper at Winewood trapped several native turkeys, retaining only those true to the wild type. After several years of selective breeding, however, occasional checks invariably showed domestic traits and markings in the younger birds.

Santee Swamp Searched

Mr. Wine, a true conservationist, refused to say die in behalf of the pure strain wild turkey. Instead, he secured the services of W. F. Welch, a veteran turkey raiser and a man who had devoted much time to the study of the wild birds' habits. Mr. Welch thereupon went to the Santee Swamps of South Carolina, a practically uninhabited area fifty miles from Charleston, where he spent two years securing wild birds for Winewood.

In the Santee area wild turkeys could be captured, but difficulty arose when an attempt was made to maintain them for breeding purposes. Unlike the Virginia turkeys, they either pined away in captivity or destroyed themselves. Finally this difficulty was overcome by locating nesting females, tracking them to their nests, and then placing the eggs thus secured under domestic birds imported into the Santee area for setting purposes.

Through these methods, Mr. Welch, after two years in the Santee Swamps, was able finally to return to Winewood with fifteen adult turkeys of the true wild strain. These are to constitute the nucleus of the restoration flock of genuine North American wild turkeys, such as the Pilgrim Fathers hunted.

As if carved from stone in bas-relief is the giant domestic turkey from the Winewood plantation shown on the front cover of this week's SCIENCE NEWS LETTER. To obtain the strange three-dimensional effect, Science Service Photographer Fremont Davis made an extra transparent positive and superimposed it on his negative. By offsetting the positive and negative slightly and making a single print from the two, the effect of sculpture is obtained.

Science News Letter, November 21, 1936

HEREDITY

Aged Twins Have Cancer Develop at Same Time

TWO old lady twins, 91 years of age, who both had developed cancer at exactly the same time were described by Drs. Samuel A. Munford and Hugh Linder, of Clifton Springs Sanitarium and Clinic, in a report to the *American Journal of Cancer*.

Not only did the cancer develop at the same time but it was located in exactly similar spots on the left breast of each. The mother, grandmother, and a maternal aunt also had had cancer of the left breast.

Science News Letter, November 21, 1936

BOTANY

Famous Botanical Collection Is "Refugee" from Spain

Plant Collection Made in Mexico in Eighteenth Century Has Now Been Brought to United States for Safety

PLANTS, no less than people, are among the refugees escaping from destruction in unhappy, revolt-torn Spain. The U. S. National Herbarium has just become host to part of one of the most famous collections of botanical specimens ever made in the New World, which was taken out of Madrid just before the present insurrection broke.

The collection, made in Mexico during the latter part of the eighteenth century, has already had a stormy and romantic history, including a previous "refugee" sojourn in France during the Napoleonic wars. Its present hegira to America ended at the doorstep of Dr. Paul Standley of the Field Museum of Natural History in Chicago, who divided it up and sent various sections to institutions where the botanists were specialists in the study of the particular groups of plants represented. The sections sent here include ferns, nettles, passion-flowers, and smilaxes.

The collection was started in 1787 by Dr. Martin Sesse y Lacasta, eminent Spanish botanist of that day, whom King Carlos III sent to Mexico to make a complete collection of the flora of that country and to set up a chair of botany at the University of Mexico. A young Mexican physician, Dr. José Mariano Mocino, joined him in the work, gave up medicine for botanical research, and returned with his chief to Spain in 1804. Upon the death of Dr. Sesse in 1809, Dr. Mocino, who had become Director of the Madrid Cabinet of Natural History, took full charge of the collection.

Through wars, imprisonment, exile, destitution, and ill health, the devoted Mexican botanist stuck with his precious collection. But after his death the valuable sheets of specimens lay neglected. Now, returned to the continent of its origin, though to a different country, it again assumes scientific importance.

Science News Letter, November 21, 1936

HE CAPTURED THE ELUSIVE BIRDS

W. F. Welch, veteran turkey raiser and caretaker at the Winewood wild turkey farms, near Parker, Va., feeds his trained "turkey" dogs which were used to find the rare fowl in the uninhabited Santee swamps of South Carolina.

LIBRARY SCIENCE

Urges Photographing Books As Preservation Measure

MICROFILMS—small sized images of books and documents upon motion picture film—give libraries an inexpensive method of preserving the written and pictorial record of our civilization.

This was made evident when C. G. Weber and J. R. Hill of the National Bureau of Standards reported to the Society of Motion Picture Engineers that the cellulose acetate or "safety" film used for such microfilms has "lasting qualities comparable with those of permanent record papers of high quality" and that the "optimal atmospheric conditions for the preservation of paper records are suitable for this film."

It was also emphasized that such safety films are no more inflammable than books and that hence they offer no new problems in fire protection.

Microphotographic duplication upon microfilm is coming into increasing use for making copies of rare and inaccessible books, for exchanging material between libraries and for making available material that could not otherwise be published. Science Service has sponsored the development of microfilms for use in connection with scientific literature.

The Bureau of Standards scientists tested the stability of both nitrate and acetate motion picture film. Cellulose nitrate film, the sort used in commercial motion pictures, is highly combustible and explosive. The nitrate film deteriorates beyond usefulness in 10 days when subjected to the accelerating aging test used upon record papers. This involves heating in a dry oven at the temperature of boiling water. The cellulose acetate or safety film, such as used for microfilm, withstood the oven-aging for 120 days without serious physical or chemical change.

This report is expected to encourage the use of microfilms in libraries and to allay any fear regarding how long they will last.

Science News Letter, November 21, 1936

The island of Socotra in the Arabian Sea is noted for its extraordinary plant life, including cucumber trees that shine in the sun like marble tombstones.