

George Washington — "First in Farming," Too

By ELMO SCOTT WATSON
(Released by Western Newspaper Union.)

A VIRGINIA gentleman dipped his goose-quill pen into an inkpot and began writing a letter. Now and then he would glance up thoughtfully, his eyes sweeping over broad acres fringing the Potomac. He was middle-aged, of commanding physique, with a stern, yet kindly face.

The letter, dated December 12, 1788, said:

"The more I am acquainted with agricultural affairs, the better I am pleased with them, in so much that I can nowhere find so great satisfaction as in those innocent and useful pursuits. Indulging these feelings I am led to reflect how much more delightful is an undebauched mind is the task of making improvements on the earth than all the vainglory that can be acquired from ravaging it."

Thus in the fullness of his years and honors did George Washington write to his English friend, Arthur Young.

Every American is familiar with "Light Horse Harry" Lee's characterization of Washington as "First in War, First in Peace, and First in the Hearts of His Countrymen." Few Americans, perhaps, are aware that Washington laid just claim to another distinction. He was "First in Farming."

Washington was America's first scientific agriculturist. He preached the gospel of soil improvement in season and out; he made original discoveries in crop rotation, seed selection and live stock breeding; he carried on important experiments in the use of fertilizers; he pioneered in the use of farm machinery.

Made Farming Pay.
The Father of his Country was a shrewd and canny farmer. He made agriculture pay. He became the richest man in the United States by reason of his success with the soil. At his death Washington, by his will, disposed of more than 49,000 acres of farm land, including his beloved Mount Vernon as well as far-flung domains in Ohio and elsewhere, which were rented or farmed by his deputies. His landed estate was valued at \$530,000, while he had additional buildings, equipment, live stock and other investments worth \$220,000. His slaves were not included in this inventory, for he freed them all in his will.

Washington's serious farming career began in 1759, at the age of 27. He had inherited Mount Vernon, married the charming Martha Custis and received a handsome dowry in lands and chattels. For the 16 years he was to devote himself to the land. Farmer Washington had plenty to contend with, however. The land he inherited was worn out by a century of tobacco growing. Concentration on this single crop year after year, with no rotation and no attempt at fertilization, had seriously impoverished the land. Unlike the farmer of today who can get advice from his county agent, state agricultural college or experiment station on whether his soil is deficient in nitrogen, phosphoric acid or potash and needs commercial fertilizer, Washington had to depend on talks with his neighbors and his reading of farm papers and books on agriculture published in England, whose editors were unfamiliar with problems in Virginia.

He corresponded frequently with Arthur Young, British agricultural scientist and editor of the "Annals of Agriculture." He collected an extensive library of agricultural books including "Horseshoe Husbandry," "A Practical Treatise of Husbandry," "The Farmer's Complete Guide," and "The Gentleman Farmer."

When Washington gleaned a new idea from his reading, he quickly tried to apply it. For instance, he laid out experimental plots on different soils of his own land similar to the plots so familiar today to any farm student. He carried on experiments with fertilizer in a fashion reminiscent of what soil scientists do today. He had ten small boxes made. These he filled with soil taken from the same part of the field so that it would be uniform in composition. One box served as a check plot. Into the other nine he placed different fertilizers such as cow manure, horse manure, sheep dung, mud from the creek, marl from a gully, black mold, and mud from the bottom of the Potomac river.

He divided each box into three sections, planting wheat, oats and barley. He used exactly the same number of seeds of each grain in each box, and planted the rows exactly the same.



WASHINGTON AT MOUNT VERNON, 1787

Mud from the bottom of the Potomac proved good fertilizer. So he built a special scow and hoisted mud. The cost of obtaining it, however, was too great for the results he got.

Washington gave increasing attention to wheat growing as an alternate to tobacco. He tried various experiments such as steeping his seed in brine and alum to prevent smut. He tried also to protect his grain from the Hessian fly.

In 1783 he entered into an agreement with John Carlyle and Robert Adams of Alexandria to sell them his wheat crop for the next seven years. The price was to be three shillings and nine pence per bushel—or about 91 cents. Considering the difference in purchasing power then and now, Washington was getting the equivalent of at least \$1.80 for his grain.

In 1769 he delivered 6,241 1/2 bushels of wheat. Thereafter he ground most of his wheat and sold the flour. He owned three mills, one in western Pennsylvania, a second on Four Mile Run near Alexandria, and a third on the Mount Vernon estate. The flour graded superfine, fine and middlings. We have Washington's own word for it that his flour was as good as any produced in America—and the Father of his Country was no boaster.

In a charmingly written monograph on "George Washington, Citizen and Farmer," Dr. J. Christian Bay, librarian of the John Crerar library of Chicago, recounts some stories of Washington as a farmer and human being. Describing some of the voluminous notes Washington jotted down in his diaries concerning his agricultural experiments, Mr. Bay says:

"Washington's attention was attracted to the old problem of large and small seeds, and he invented a barrel-seeder to

ever convinced of the desirability of pastures and of live stock for conserving the soil. He was more wide-awake to the need of better tools.

The run-down condition of his soil, however, was a cause of increasing concern. Unfortunately for him fertilizers, as we know them today, were not in existence.

As a soil conservation measure, Washington began to experiment with clover and other grasses. He was prompted to do this at the urging of Noah Webster, newspaper reporter, editor, and famous as the compiler of a dictionary. Webster had expounded his theory that some plants have the power to reach into the air and extract nitrogen fertilizer which their roots fix in the soil.

"Nature," said Webster, "has provided an inexhaustible store of manure which is equally accessible to the rich and poor and which may be collected and applied to land with very little labor and expense. This store is in the atmosphere, and the process by which the fertilizing substance may be obtained is vegetation."

Washington tried every kind of legume known to Virginia farmers, and imported many kinds of seeds from England. In this way he introduced timothy to his countrymen. He early discovered that clover and peas had a soil enriching power. In an English journal he read about a new legume—alfalfa—which had been brought from Switzerland. He found that alfalfa, too, could enrich the soil, but it never proved profitable for him.

Even while serving as President from 1789 to 1797, Washington found some time to keep an eye on his farming operations. He had extensive experiments conducted in grain and live stock breeding. He imported new strains of wheat from South Africa and Siberia, neither of which proved as good as his Virginia grain.

Rotation of Crops.
Washington drew up elaborate plans for rotation of crops on his different farms. Not content with one plan, he often drew up several alternatives. He calculated the probable financial return from each, allowing for the cost of seed, tillage and other expenses.

He was constantly on the alert for better methods of threshing grain than the age-old practice of treading and felling. He read in an English farm journal about a threshing machine invented by a man named Winlaw. In 1790 he had observed the operation of Baron Poelnitz's mill near New York city, based on the Winlaw model. This mill was operated by two men and threshed about two bushels of wheat per hour.

In 1797, two years before his death, Washington built a thresher, himself, on plans evolved by William Booker, who came to Mount Vernon and directed the construction. In April, 1798, Washington wrote Booker: "The machine by no means answered your expectations or mine."

At first it threshed about 50 bushels a day, then fell to fewer than 25, and finally broke down completely, although it had used up two belts costing between \$40 and \$50.

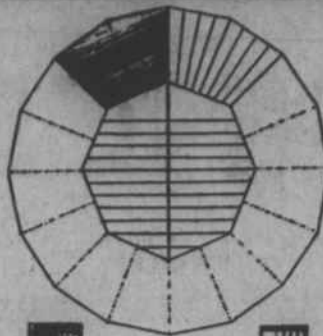
"Washington was essentially America's first conservationist," an official of the Middle West Soil Improvement committee pointed out recently.

"The Father of his Country realized that man owes a duty to the future as well as the present welfare of his soil," he said.

"Washington's primitive attempts to put back into the soil the fertility that had been depleted by constant croppings are testimony of this characteristic."

As a public man, Washington was eager to improve the lot of agriculture. In his last message to congress he recommended the establishment of a "Board of Agriculture to collect and diffuse information, and by premiums and small pecuniary aids to encourage and assist a spirit of discovery and improvement."

But nearly a century passed before anything so important was done by the federal government to promote the development of agriculture.



Part of Washington's plan for his sixteen-sided barn.

One invention of which Washington was proud was a 16-sided barn which he built on one of his farms in 1793. He estimated that 140,000 bricks would be required for the structure. These were made and fired on the estate.

The barn was especially notable for a threshing floor 30 feet square. An ingenious method of separating the grain and straw was provided by interstices of one and one-half inches between the floor boards. Thus when the grain was trodden by horses or beat out with flails, the kernels fell through to the floor below.

This floor was to furnish an illustration of what Washington called "the almost impossibility of putting the overseers of this country out of the track they have been accustomed to walk in."

"I have one of the most convenient barns in this or perhaps any other country, where thirty hands may, with great ease, be employed in threshing," he wrote a friend. "Half of the wheat of the farm was actually stowed in this barn in the straw, by my order, for threshing. Notwithstanding, when I came home about the middle of September, I found a treading yard not thirty feet from the barn door, the wheat again brought out of the barn and horses treading it out in an open exposure, liable to the vicissitudes of the weather."

What Washington said to the overseer on this occasion has not been recorded for posterity. But it is a safe bet that the man remembered it for the rest of his days.

The Father of his Country is often pictured as a man without a sense of humor. Yet in the midst of sober agricultural experiments, he gave the following ad-



The seed house at Mount Vernon.

vice on how to keep warm all winter by the aid of a single piece of wood. The story is told by Mr. Bay:

"Select a suitable piece of wood, rush upstairs as fast as you can, open a window, throw out the wood. Rush downstairs into the yard and seize the wood again. Rush upstairs once more, throw out the wood a second time. Rush downstairs and get it and continue in this manner until you are warm. Repeat this process as often as necessary."

He concluded this piece of advice with the words: "Probatum Est."

But it is as a prophetic contributor to the knowledge of soil conservation that he will be best remembered in his career as a farmer.

"It must be obvious to every man who considers the agriculture of this country," Washington wrote in 1796, "and compares the produce of our lands with those of other countries, no ways superior to them in natural fertility, how miserably defective we are in the management of them; and that if we do not fall on a better mode of treating them, how ruinous it will prove to the landed interest."

"Age will not produce a systematic change without public attention and encouragement; but a few years more of sterility will drive the inhabitants of the Atlantic states westwardly for support; whereas if they were taught how to improve the old instead of going in pursuit of new and productive soil, they would make those acres which now scarcely yield them anything, turn out beneficial to themselves—and to the community generally—by the influx of wealth resulting therefrom."

First to Greet U. S. as Nation

St. Eustatius Isle Linked With Early American History.

WASHINGTON.—Uncle Sam's recent presentation of a bronze plaque to the authorities of St. Eustatius island, in the West Indies, added a postscript to an early chapter of United States history. The gift was in commemoration of the first foreign acknowledgment of United States sovereignty made to a national vessel.

"In 1776, when the guns of St. Eustatius island saluted a Baltimore brig o' war (thereby recognizing the Western hemisphere's first republic), this island was one of the West Indies' richest spots," says the National Geographic society.

"As a free port, it was known as the 'Golden Rock,' where ships of many nations came to trade, and to take on water and food supplies.

"About 200 miles east of Puerto Rico, St. Eustatius, with only seven square miles of area, was a garden whose fertile fields produced sugar cane, coffee, tobacco, indigo, cotton, and cassava, a starch-yielding plant.

"Hundreds of ships, old records say, sometimes lay at anchor outside the harbor at Orange Town. In the streets of the town rough chests of tea and bales of cotton were used by merchants as temporary desks, while a chorus of bids and counter bids rose in half a dozen tongues.

"During the first period of the American Revolution, St. Eustatius carried on an active trade with the struggling colonies, serving as a depot for military and other supplies from the Netherlands to be used in the conflict.

Stuffs Fatal Blow.
"Within five years of the island's gesture of recognition toward the new American government, however, St. Eustatius suffered a fatal blow from the British, then at war with the Netherlands. In 1781, a British commander seized the port. Selling off the property of the islanders, the conquerors reaped a financial harvest estimated at from fifteen to twenty millions of dollars.

"At Orange Town, today, only the ruins of its many warehouses remain as a reminder of St. Eustatius' former prosperity. The island's population now is less than 1,500. Yams and cotton are its chief exports today."

Grandmother, 70, Takes Music Course in College

ATHENS, OHIO.—Mrs. Orinda E. Peoples, 70 and a grandmother, is going to college now. Retired as assistant postmaster here because of age requirements of the postal service, Mrs. Peoples is resuming her study of music at Ohio university here.

In her younger days Mrs. Peoples was regarded as a capable pianist. To improve her playing, she plans to attend regular class studies in the course.

Prior to beginning her postal duties in 1910, Mrs. Peoples had the distinction of being the first woman bank employee in the city.

She has two daughters, both of whom are married.

Building Strike Records Of 99 Years Ago Found

ST. LOUIS.—Records of a strike called 99 years ago by construction workers on St. Louis' old courthouse have been found at the city hall. The workers were represented by the Journeymen Mechanics' societies which obtained a 10-hour day for its members. They had been working 12 and 14 hours a day prior to the strike.

The records were referred to the national park service, which has asked for all available historical information concerning buildings which are to be preserved in the Jefferson Riverfront memorial.

Britain Pushes Drive For Private Gardens

LONDON.—The ministry of agriculture, backed by various societies, is planning a big food production campaign.

By public meetings and lectures, by committees, by every means possible, householders are being urged to make use of their gardens and to increase their work on allotments.

At present it is estimated that there are roughly 3,500,000 private gardens in England and Wales, in addition to some 1,500,000 allotments which will be under cultivation in the spring, and the campaign is still forging ahead.

'Can Opener' Technique Developed by the Finns

HELINGSFORS.—The Finns have developed a new "can opener" attack on Russian tanks.

Two Finns armed with crowbars lay in wait for a tank in the woods. They jumped out as it passed, climbed aboard and started to pry open the turret top. The tank crew, unable to fire on the Finns, tried to dislodge them by careening the tank over obstacles. The Finns managed to stay on, it was said, and, succeeding in prying open the top, dropped in a hand grenade which killed the tank crew.



By L. L. STEVENSON

Endurance: Frank Oliver, Reuters correspondent, in New York for a brief visit after several years in the Far East, told of a conflict with Japanese military authorities at Peiping because he published a story about a Jap sentry allying the wife of the governor. The Japs demanded a retraction but, insisting that the story was true, Oliver stood pat. The day after the military inquiry, 40 Jap buglers appeared in the vicinity of his residence. One Jap bugler is terrible, he said, so it is easy to imagine what 40 of them could do. It was hard to take but he just sat back and let them bugle. They kept it up for three days. Then the newspaper man was again summoned before the generals. They informed him that the story having been found true, they were ready to apologize. And with that, bugle practice ended abruptly.

Gotham Gadabout: Dinah Shore

in a Radio City drug store singing the alma mater song of Vanderbilt U with two former classmates . . . Benay Venuta at a Broadway milk bar drinking a chocolate mix . . . Crowds during the luncheon hour stopping to watch prouetting figures at the Rockefeller Center ice rink . . . Bea Wain, hatless, in a CBS lounge, signing up members for her "Hats-off-in-the-movies" campaign . . . Johnny Green, observing a vagrant picking up a butt, offering him a cigarette and being refused with the comment, "It ain't my brand" . . . Shopkeepers idly staring from windows and wondering when the public will recover from the holidays.

Going Up: James Stewart, of the movies, was the 4,000,000th visitor at the Empire State building tower recently. Stewart, who received the motion picture critics' award for the best performance given by a male screen star during 1939 for his work in "Mr. Smith Goes to Washington," was accompanied by Miss Olive Cawley, of New York. Being connected with pictures, Stewart naturally had a picture postcard made of himself and his companion. Incidentally since the tower was opened on May 31, 1931, it has had visitors from every country in the world. Despite the war, they are still coming. During a recent week, representatives of 35 countries, other than our own, were registered.

New York: Dick Todd, youthful singer from Montreal: "New York is a funny town. While they were tearing down the Sixth avenue elevated they were tearing up Sixth avenue to build a subway" . . . Milt Herth, organist from Kenosha, Wis.: "New Yorkers risk injury to duck into a section of a rapidly moving revolving door, saving, at the most, two seconds. Then they waste hours watching a building being constructed or two taxicab drivers engaged in an argument" . . . Kay Kyser, orchestra leader from Rocky Mount, N. C.: "A New Yorker will religiously remove his hat in a hotel elevator. But he will remain seated in the subway or a bus while an aged woman, loaded down with bundles, totters precariously in front of him."

Lesson: Abe Lyman recently saw in a Broadway movie house a film of the Dempsey-Willard fight in 1919 when Dempsey tore the giant Willard to ribbons. "He babied Willard compared with what he did to me one night," Lyman commented on his way out. "I confided to Jack my secret ambition to become a prize fighter. He took me to his private gym and said, 'Abe, this is going to hurt me more than it will you but I've got to knock that notion out of your head.' Then he let me have it." P. S.—Lyman and Dempsey are pals.

End Piece: Encountering a friend on Broadway, Frank Luther recalled that he hadn't seen him in some time and had heard things weren't going so well with him. "How's business?" he inquired. "Business is a little weak," was the reply, "but not from lack of rest."

(Bell Syndicate—WNU Service.)

Check on This One

SCRANTON, PA.—A defendant in court here was acquitted of bootlegging charges when he explained that his still was to make cough medicine for his 15 children.

Sunday School Record

Perfect for 39 Years
SHELTON, CONN.—Miss Ethel G. Smith has attended Sunday school every week for 39 years without missing a session.

The International Cross and Crown society, organized in 1902, had honored her each year since that date by awarding her a gold link.

Several times, she said, she arose from a sick-bed to attend school so as not to spoil her perfect attendance record.

Glamorous Skirts For Dressing Table



Pattern 6459

THE glamour of a dressing table can easily be yours. Clear directions for four different dressing table skirts—economical yardages—directions for adapting any table are all in this practical pattern. Pattern 6459 contains instructions for making four dressing tables; materials needed; pattern of scallops and rounded edge.

To obtain this pattern send 15 cents in coins to The Sewing Circle Household Arts Dept., 259 W. 14th St., New York, N. Y.

HOUSEHOLD QUESTIONS

Sew several thicknesses of old turkish towel together for hot dish or pot holders.

Carving lamb roasts is much easier if they have been boned and tied before cooking.

Tarnished egg spoons can be quickly cleaned by washing with a rag dipped in salt.

French fried potatoes will be more crisp if allowed to stand in cold water for half an hour before frying.

Felt hats can be cleaned by rubbing with a not too fresh or too stale piece of bread.

Threading curtains on to their rods again after washing is difficult—and if they are thin the blunt end of the rod may tear them. Avoid this by fitting a smooth thimble over the end of the rod before threading.

To clean a clock, saturate a piece of absorbent cotton about as large as a hen's egg with kerosene oil and place it in the bottom. Close the door and let the cotton remain for three or four days. Then take it out and swing the pendulum. Unless something is broken, the clock will go all right, as the fumes from the oil cleans the works.

Kitchens should be cheerful and comfortable as well as convenient. A high stool is an aid to comfort in preparing vegetables or mixing ingredients. An attractive corner where the homemaker can sit and read over a new recipe, make out her order list of groceries or wait for a dish to finish cooking adds considerably to a comfortable kitchen.

SANDPAPER
THROAT
Does your throat feel prickly when you swallow—due to a cold? Benefit from LUDEN'S special formula. Contains cooling menthol that helps bring quick relief. Don't suffer another second. Get LUDEN'S for that "sandpaper throat!"
LUDEN'S 5'
Menthol Cough Drops

Clear Gain
Whatever happens beyond expectation should be counted clear gain.—Terence.

HOW ARE YOUR NERVES?

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