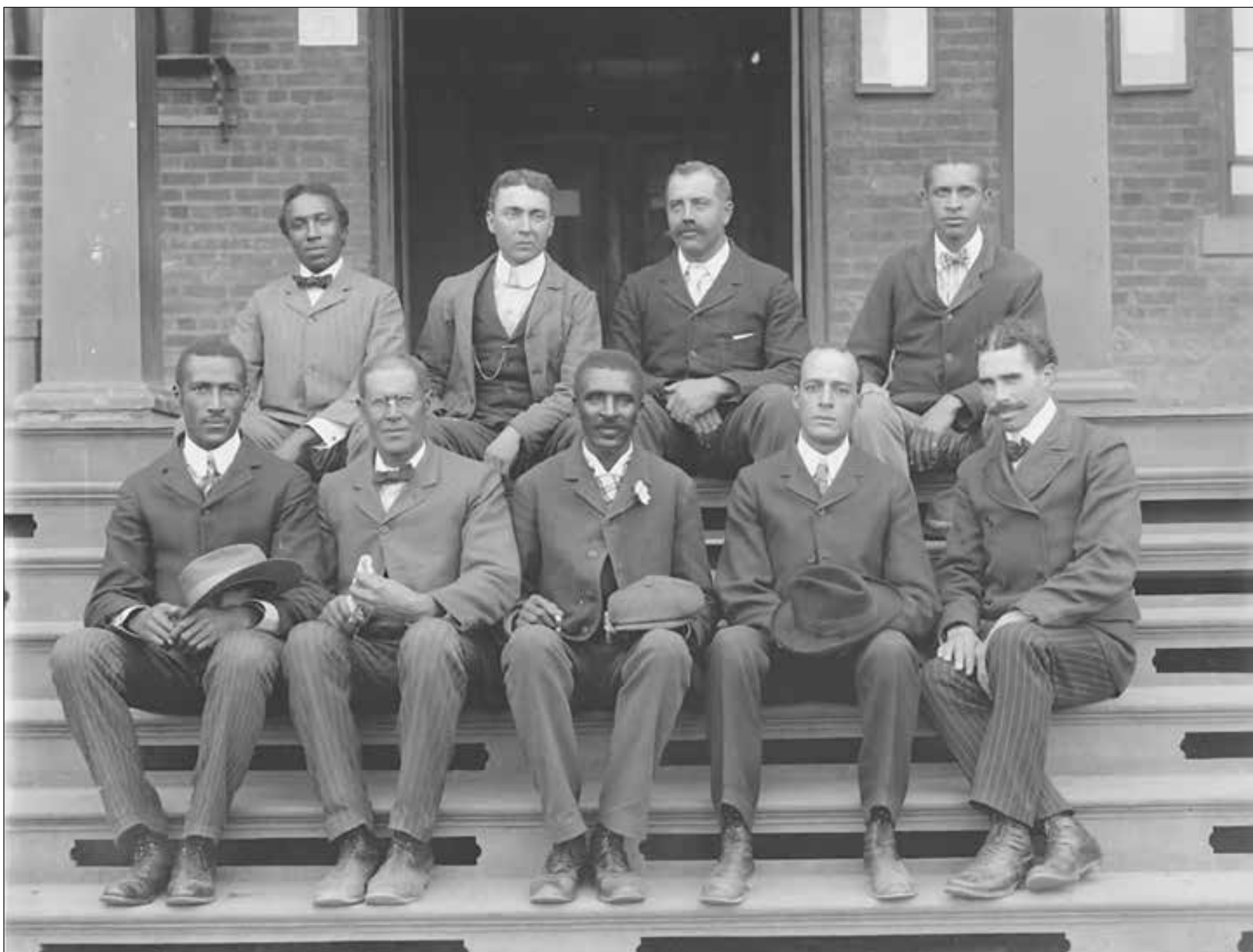


# Black innovators Reshaped America



This 1902 portrait provided by the Library of Congress shows scientist and inventor George Washington Carver (front row, center), seated with other staff members on the steps of the Tuskegee Normal and Industrial Institute in Tuskegee, Ala.

## They changed the ways we eat, farm and garden

(AP) -- The achievements of George Washington Carver, the 19th century scientist credited with hundreds of inventions, including 300 uses for peanuts, have landed him in American history textbooks.

But many other agricultural practices, innovations and foods that traveled with enslaved people from West Africa — or were developed by their descendants — remain unsung, despite having revolutionized the way we eat, farm and garden.

Among the medicinal and food staples introduced by the African diaspora were sorghum, millet, African rice, yams, black-eyed peas, watermelon, eggplant, okra, sesame and kola nut, whose extract was a main ingredient in the original Co-

ca-Cola recipe.

Whether captives smuggled seeds and plants from aboard slave ships or captains purchased them in Africa for planting in America, key components of the West African diet also journeyed along the Middle Passage across the Atlantic.

After long days spent working on the plantation's fields, many enslaved people grew their own gardens to supplement their meager rations.

"The plantation owners could then force them to show them how to grow those foods," said Judith Carney, a professor of geography at UCLA and co-author of "In the Shadow of Slavery: Africa's Botanical Legacy in the Atlantic World" (University of California Press, 2011).

"Those crops would then become commodities," said Carney, who spent a decade tracing such food origins by reconciling oral history with written documents.

Multicropping (growing different types of plants in one

plot), permaculture (emulating natural ecosystems) and planting on mounds (arguably the precursor of berms) can be traced to African agricultural practices.

History did not record many inventions of enslaved Africans, in no small part because slaveowners often claimed credit. Some, however, were recognized, as were the accomplishments of many who came after them.

Here are some early Black innovators whose contributions reshaped the agricultural landscape:

### Henry Blair (1807-1860)

Only the second Black man to be awarded a U.S. patent (Thomas L. Jennings, who invented an early method of dry-cleaning clothes in 1821, is believed to be the first), Blair designed a wheelbarrow-type corn planter to help farmers sow seeds more effectively. Two years later, he received a second patent for a mechanical horse-drawn cotton planter, which increased yield and productivity.

### George Washington Carver (1864-1943)

As head of the agriculture program at Alabama's Tuskegee Normal and Industrial Institute (today's Tuskegee University), Carver gained fame for his peanut research and invented hundreds of peanut-based versions of products, including flour, coffee, Worcestershire sauce, beverages, hen food, soap, laxatives, shampoo, leather dye, paper, insecticide, linoleum and insulation.

He also devised alternative uses for other crops, and is credited with discovering the soil-rejuvenating benefits of compost and promoting crop rotation as a means of preventing the depletion of soil nutrients.

### Frederick McKinley Jones (1893-1961)

With a background in electrical engineering, Jones is credited with many inventions — from a portable X-ray machine to a broadcast radio transmitter — but one in particular made a drastic impact

on the modern American diet: mobile refrigeration technology.

Jones developed a refrigeration system that was installed in trucks, train cars, airplanes and ships, enabling the safe transport of perishable foods around the world.

### Booker T. Whatley (1915-2005)

An Alabama horticulturist and agriculture professor at Tuskegee University, Whatley introduced the concept of "clientele membership clubs" in the 1960s to help struggling Black farmers, who often were denied the loans and grants afforded to their white counterparts.

Today's Community Supported Agriculture (CSAs) and U-Pick farming enterprises grew directly from Whatley's ideas, as, it can be argued, did the farm-to-table and eat-local movements. Whatley also pioneered sustainable agriculture and regenerative farming practices to maximize biodiversity and keep soil healthy and productive.