

PLANT HUNTERS

The Stories of Two Woman Botanists



THE GOOD AND THE BEAUTIFUL LIBRARY

by Amy Drorbaugh

Anna Atkins

A Scientist is Born

On a misty spring day in the southeast of England, in the county of Kent, a beautiful baby girl was born. Her adoring parents didn't know it, but she would grow up to become an accomplished scientist. She would even change history. But on this day in 1799, in the town of Tunbridge, she was just a precious infant snuggled in the loving arms of her mother. Her parents named her Anna.



Anna began gathering all types of plants, but she was especially interested in algae. She wanted to document all the different specimens of algae in the British Isles. She began gathering as much seaweed as she could find. Her collection grew to more than fifteen hundred samples!



DID YOU KNOW?

Algae produces more than seventy percent of the earth's oxygen. Without algae, life could not flourish on Earth.

Thousands of different kinds of algae grow in various colors and forms and can be found everywhere on the planet—even on snow and ice.

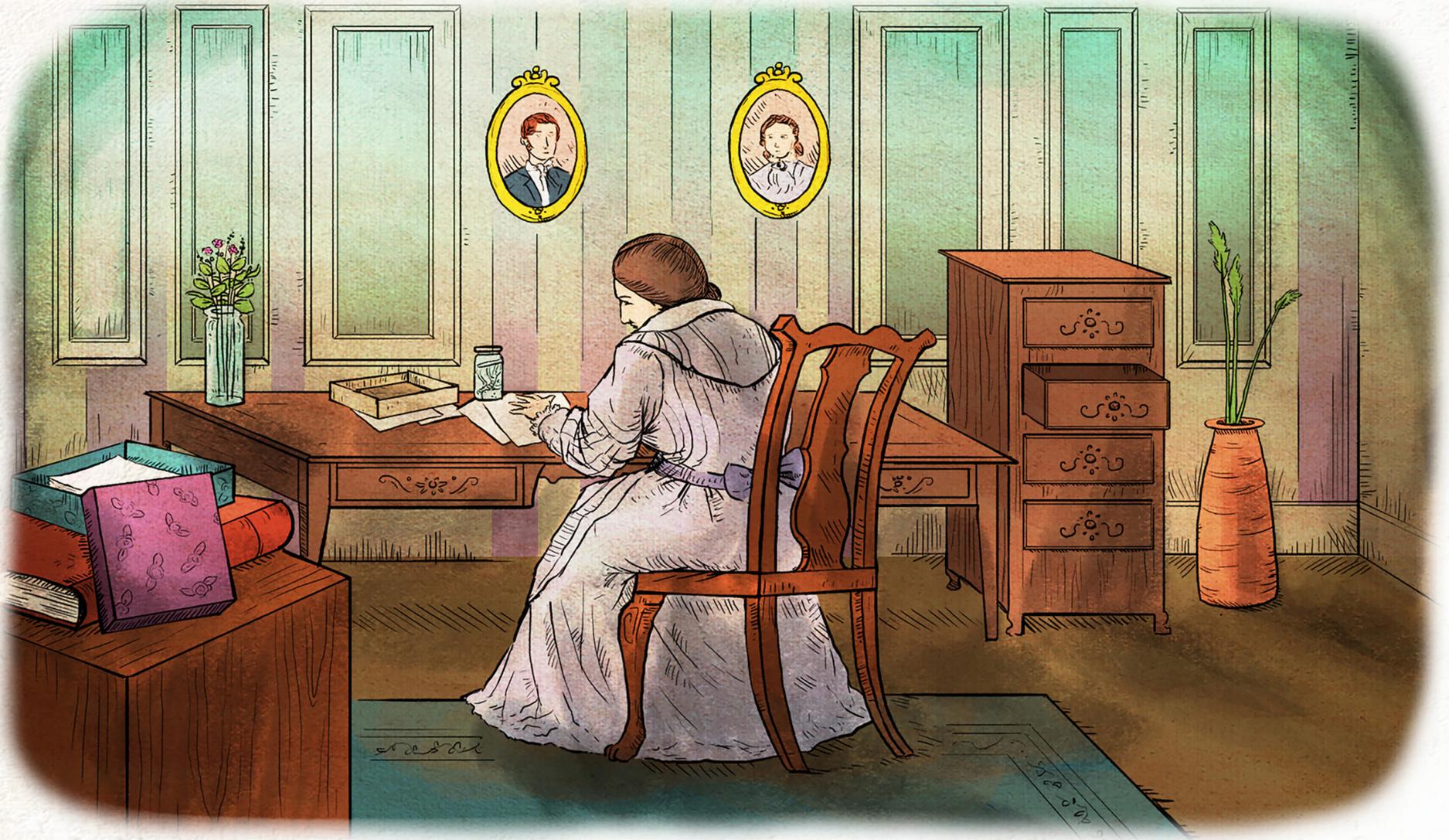
Fossilized algae are used to make dynamite.

In some areas of the Indian Ocean, the sea surface lights up so brightly at night that one can read a newspaper. This light is caused by tiny sea algae, the Dinoflagellata.

Anna was inspired! At home she performed her own experiment. She carefully covered a piece of paper with a mixture of potassium ferricyanide and ammonium iron. Then she took the paper outside into the bright morning sunshine and laid it on the ground. Anna selected one of her favorite plants from her herbarium and deliberately arranged the plant on top of the treated paper. She slid a sheet of glass on top and waited.



Only minutes later, she removed the glass and the plant and gently rinsed the paper in fresh running water. Before her eyes the paper darkened into a beautiful blue color, except for where the plant had been. Slowly, the plant impression appeared, white like a cloud against a blue sky. Anna could see every detail: the leaves and stem, the curves and edges. A beautiful plant was perfectly recreated on the paper in just minutes, more realistic than any illustration! Anna had created a photogram.



Over the next ten years, Anna made more than two thousand photogram prints and published more volumes of her seaweed collection. She also made cyanotype books about flowers and ferns of the United Kingdom. In 1865 Anna donated her entire collection of plants to the British Museum of Natural History.

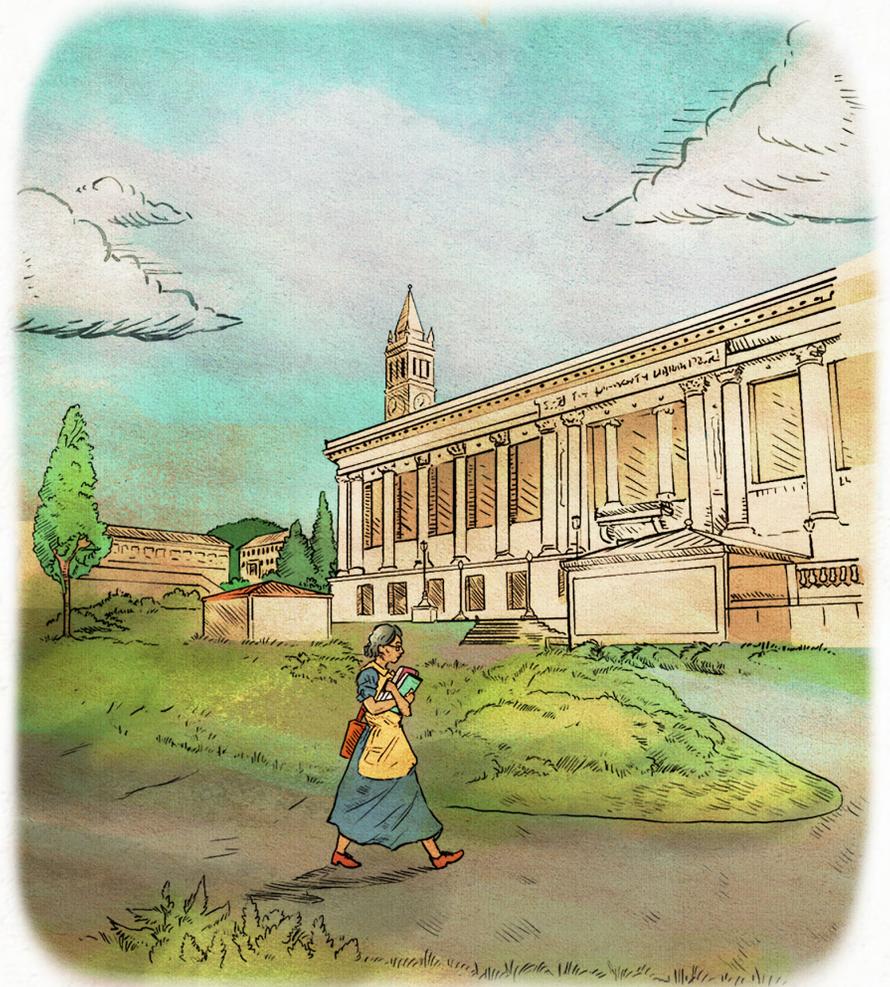
Ynes Mexia

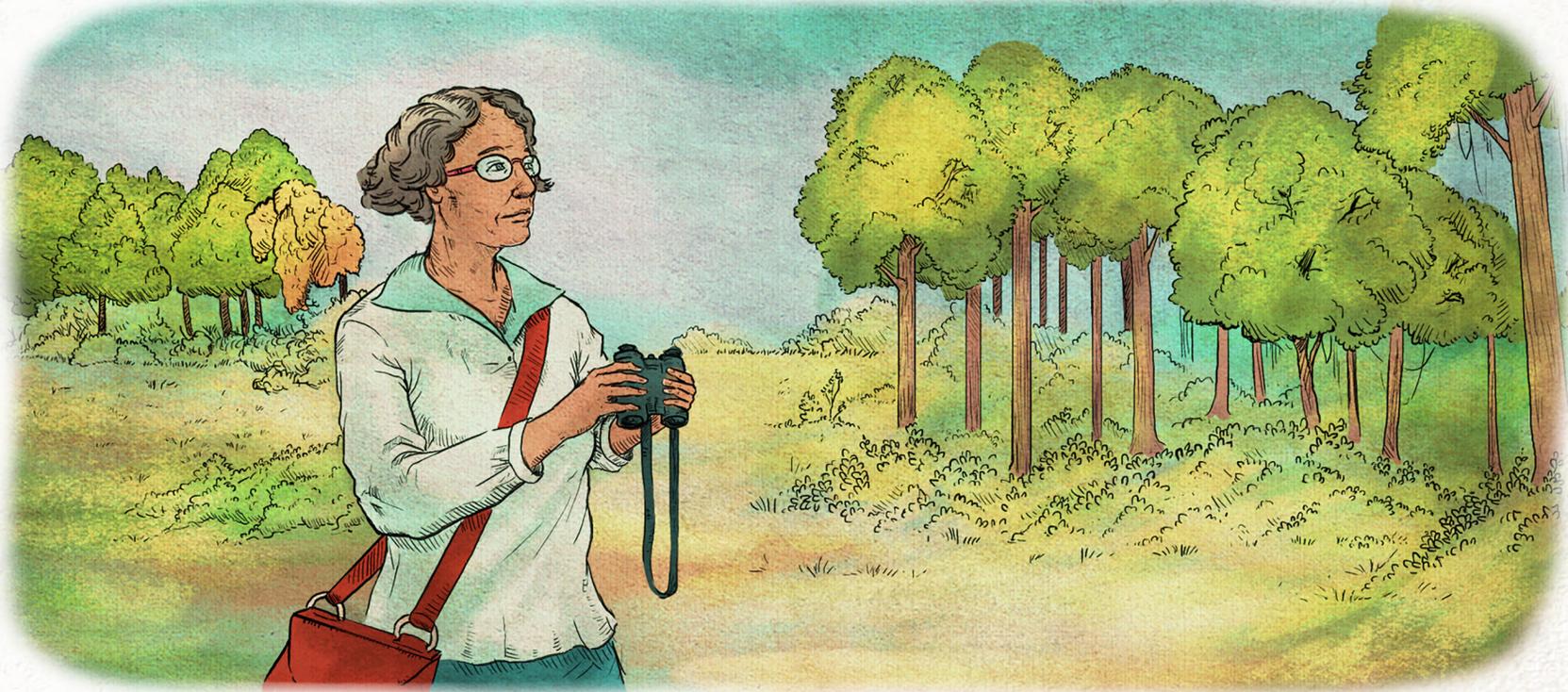
An Independent Explorer



Ynes Mexia walked onto the campus of the University of California, Berkeley. She took a deep breath, thrilled to be at the school for her very first day of classes. She ignored the strange looks she received from other students walking by and, clutching her books close to her chest, set out to find her first class: Natural History.

It was 1921, and Ynes was different from all the other students. Her short white hair and pattern of fine wrinkles made her stand out among the other fresh-faced college students. You see, Ynes was fifty-one years old—three decades older than most of the other students! She didn't mind, though, because she had finally discovered her passion in life and was eager to learn.





Shortly after starting college, Ynes was invited on a botanical collecting trip to Mexico. Her Mexican heritage was an asset while traveling because she could speak the language and felt comfortable with the native people she encountered. Shortly after she arrived in Mexico, she decided to leave the organized group; years of being alone made her feel comfortable striking out on her own.

It was virtually unheard of for a woman to travel alone in the 1920s. Ynes later wrote about this time, saying, “A well-known collector and explorer stated very positively that ‘it was impossible for a woman to travel alone in Latin America.’ I decided that if I wanted to become better acquainted with the South American continent, the best way would be to make my way right across it.”

DID YOU KNOW?

Botanical collecting is a slow and labor-intensive process.

To locate new plants never collected before, a botanist often travels deep into the unknown wilderness.

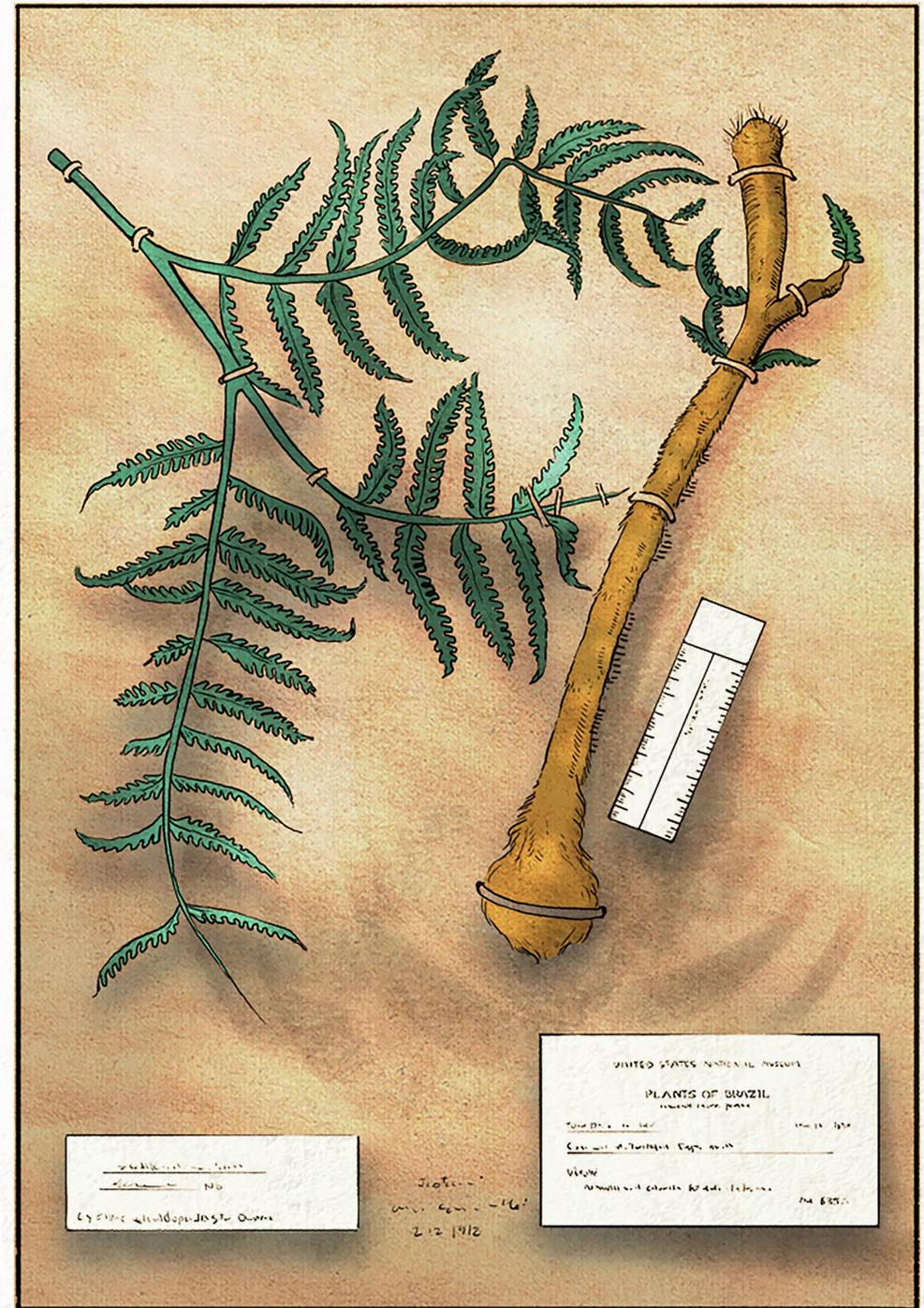
If the plant is small, the botanist must carefully unearth the entire plant, being sure not to damage the specimen or its roots.

If it is a large or heavy plant, such as a tree, a sample must be carefully pruned off in a way that will not damage the plant.

Often a plant must be dissected to properly identify it before pressing.

Once collected, the plants must be pressed, allowed to dry completely, and stored for shipment.

Eventually, the plants are labeled and sold to museums and herbariums.



DID YOU KNOW?

Many of the plants Ynes discovered were named after her.

Mimosa mexiae was the first plant named after Ynes. It is a flowering plant in the pea family (Fabaceae) and has a brilliant pink spiny flower.

Ynes discovered a new genus of flowering plants in the sunflower family in western Mexico. The genus was named *Mexianthus* in her honor.

Zexmenia mexiae is a yellow flowering plant from the daisy family.



In 1937 the sixty-seven-year-old botanist returned to California, but she quickly grew restless. “Now that I am back after more than two years in the wilds of South America, I find myself longing for a nice quiet jungle again,” she told a reporter in March. By October she was on her way back to her beloved Mexico, but it would be her last collecting trip. As she traveled she frequently felt tired and unwell. Eventually, a Mexican doctor convinced her to return to California, where she passed away just a few months later.



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Step outside into nature and look around. Do you see the trees, notice the grass, and smell the scent of the woods? Anna Atkins discovered her love for plants when she was just a little girl. Following her father, she discovered beauty in the world around her. Ynes Mexia struggled through grief and loneliness for much of her life.

When she was in her fifties, she, too, discovered a passion for plants. As you read about these amazing botanists and their adventures, remember that whether you discover your life passion at the age of five or fifty-five, it is never too late, nor too early, to follow your dreams.

