

SHADBOLT PARK



A VISITOR GUIDE PRODUCED FOR
SURREY DAY 2024



COUNCILLOR KIM SPICKETT



THE SHADBOLT LEGACY

A SMALL PARK AND GARDEN IN THE VERY NORTHERNMOST PART OF THE COUNTY OF SURREY INSPIRED LOCAL VOLUNTEERS TO RESTORE A HIDDEN HERITAGE.

SO WHO WERE THE SHADBOLTS? PIONEERS OF ENGINEERING, SCIENCE, HORTICULTURE AND ARIAL PHOTOGRAPHY.

THIS STORY IS ONE OF INNOVATION, CONTROVERSY, BEAUTY AND TRAGEDY.

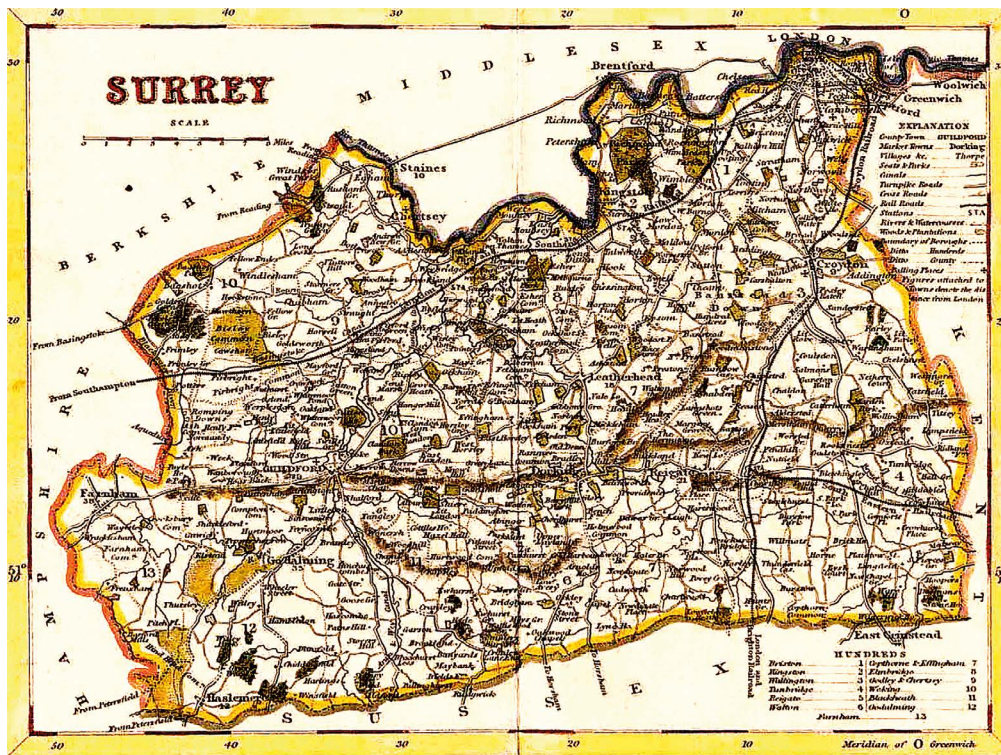
SURREY DAY, NOW IN ITS SIXTH YEAR, IS A CELEBRATION OF ALL THAT IS GREAT ABOUT OUR COUNTY.

THE THEME FOR SATURDAY, MAY 11. 2024 IS “SURREY FROM THE SKY”

“CUDDINGTON, a parish in the second division of the hundred of Copthorne, in the county of Surrey, 1 mile N.E. of Ewell, its post town, and 13 miles from London by road, or 17 by the Epsom and Leatherhead branch of the Brighton and South Coast railway, which has a station at Ewell, as also has the London and South-Western line. The village is small, but several new villas have recently been built.”¹

What is now the very north of our county was part of a larger map that took in parts of what we now call Greater London. Natural beauty and good transport connections made the area a very attractive prospect for wealthy commuters wanting to live in leafy suburbs close to business in London.

Ernest Ifill Shadbolt was born to George and Elizabeth Shadbolt on 15 July 1851, the third of eight children. He completed



The county of Surrey, 1850. The boundary extended into what is now Greater London.

Shadbolt, Ernest Ifill; Director of Railway Construction (retired); b. 1851; s. of late George Shadbolt; educ: privately; R.I.E. College, Cooper's Hill; entered Indian Public Works Department, 1874; Assistant Engineer on construction of Idore, Dhond-Manmad, Bopal State Railways, 1874-83; services lent to Bhavnagar and Gondal States, 1887-91; Executive Engineer on construction of Sind-Peshin, Kathiawar, East Coast State Railways, 1888-93; Engineer-in-Chief, Bezwada, Madras, Madura-Pamban, Tinnevely-Quilon Railway Surveys, 1893-95; Engineer-in-chief, Indus Bridge Works, Kotri-Rohri Railway, 1895-1901; Senior Inspector of Railways, Madras, 1902-04; Director of Railway Construction, Government of India, 1904-06; retired from Indian Rail-

his education at the Royal Indian Engineering College, Coopers Hill, Egham, then moved to India to work in the Railway Branch of the Public Works Department. A notable project was the construction of large rail bridges, including the “Lansdowne Bridge” over the Indus at Sukkur in Pakistan.

In 1920, Ernest bought this land in Cuddington, named “Dark Field” by the villagers, for a nearby copse that cast dark shadows. This was farmland (in the 16th century, part of the Great Park of Nonsuch Palace). Ernest named his newly built house “Darkfield”.

Previously, he had lived at Fox Corner in Pirbright, Surrey. He sold his home and land there to finance his project in Cuddington.

During his almost thirty years of retirement, Ernest supported the promotion of open spaces for the public, serving as Treasurer and Vice-Chairman of the Metropolitan Public Gardens Association, founded in 1882 to create and preserve public

was opened to the public that year. For a period, it housed a branch County Library. When that closed, it became a doctors’ surgery.²

GEORGE SHADBOLT

During the process of a grant application on behalf of the park volunteers to Suez Communities Fund, I got sight of the original title deed for the

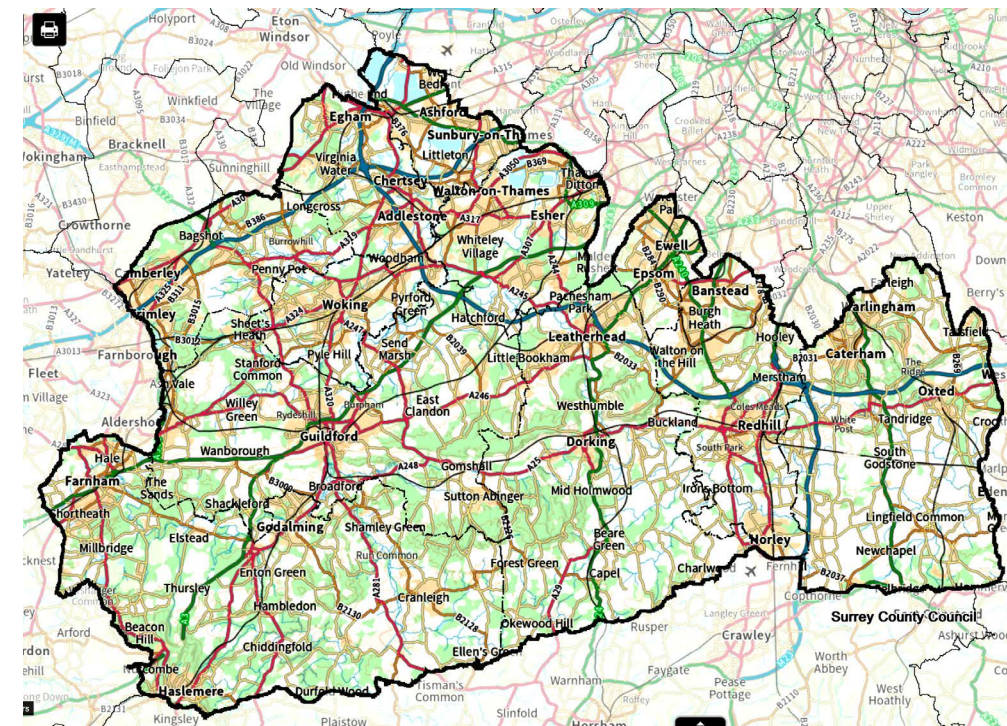
house, with the address as “Salisbury Road”. A search for “Shadbolt Darkfield” threw a mystery my way. Page after page of “Darkfield Microscopy” appeared on my Google - with the name “George Shadbolt”.

At the time my knowledge of the Shadbolt family history was limited; I didn’t think it could be the George who was Ernest’s father. As I understood, George was a wealthy Victorian timber merchant who dabbled in photography. Reading further, I discovered that

it was indeed the same George - an enthusiast of photojournalism and photographic techniques.

George (1819–1901) was an early experimenter in photography and a student of optics. A founder member of the Photographic Society and a writer and editor of the Photographic Journal and the Liverpool and Manchester Journal, subsequently the British Journal of Photography, he produced picturesque landscapes and portraits, but was most notable as a pioneer of photographing microbes and other small objects.³

In addition, he was an early advocate of using small negatives to produce large prints on salt paper. He lived at one time at Cecile House,



The county of Surrey today.

open spaces and gardens. Ernest’s travels inspired him to collaborate with experts at Kew to create a tree collection. These specimens are recorded - you will find blue labels on some of the trees in the park.

Ernest died on 16 June 1938, just short of his 87th birthday. He never married.

His neice, Lillian Brimble (right), who cared for and kept house for Ernest was named as the executor of his will. Interestingly, when she was much younger, she had been a governess to the German royal family.

Darkfield and its gardens were offered to the Municipal Borough of Epsom and Ewell, which they purchased for £3,500 in 1937. Shadbolt Park



1. Description(s) from The National Gazetteer of Great Britain and Ireland (1868), Transcribed by Colin Hinson ©2003

2. Epsom and Ewell History Explorer website, retrieved 2024

3. George & Cecil Shadbolt - Pioneer Photographers by Colin Fenn

High Numerical Aperture Dark Field Condensers

The first condenser made specifically for dark field was produced by Francis H. Wenham and George Shadbolt in 1855. This condenser used a **parabolic glass reflector** to create a hollow cone of light. Unlike a refracting condenser, a reflecting condenser does not produce chromatic aberrations and a parabolic shape minimizes spherical aberrations. The result is a more finely focused spot of light. Other dark field condenser designs emerged over the years.

F.H. Wenham



104 Crouch Hill, Hornsey N8. His last recorded address was 119 Hopton Road, Streatham.

New technology was the preserve of the very wealthy Victorian. Not content to be “hobbyists”, they formed associations with like minded persons. George Shadbolt was a founder member of the Microscopical Society. Using his own honey collodion process, George Shadbolt became a leading figure. His interest was diatoms; intricate, single celled, silica-encased algae. They are beautiful; George is the discoverer of one family of these organisms and there are records at Kew: “*The outline of the largest is very clumsy... this I call validum; the other, P.inflatum, on the contrary, is of a graceful outline...*” A keen experimental photographer, he set himself the task of taking microscopic pictures and creating glass slides to show fellow enthusiasts.

The “dark ground” method of microscopy allows light onto the specimen, with the background remaining black in order to show clearer and sharper detail. Joseph Lister had already used the dark ground method for his microscope studies. George was keen to improve the quality and clarity of this method in order to produce images far superior to anybody elses.

The engineer Francis H. Wenham was a friend and fellow microscope enthusiast. So brilliant was his mind that he studied aeronautics “as a sideline”; his inventions were numerous. Francis’ first “parabolic condenser” for microscopes helped to sharpen the

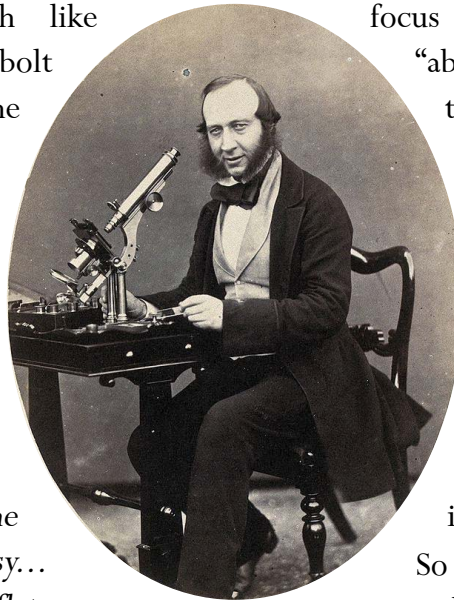
subjects for study. Unfortunately, the focus was not up to scratch.

By 1855, Shadbolt’s collaboration with Wenham and the subsequent re-build delivered improved focus - a sharper image with less “abberations” to confuse the viewer: the modern Darkfield method was born! The Wenham - Shadbolt Darkfield Condenser was used for many decades. This improvement advanced medical science; some credit this with the accurate diagnosis of syphilis, when the spirochete - spiral-shaped bacterium - could be clearly imaged.

So was Ernest’s purchase of land named “Dark Field” homage to his father’s work, or is that fanciful thinking? Of all the places available for his “retirement project” to create a fine garden, I think that the sales particulars may have - at the very least - caught his eye.

The Shadbolt family home in Hornsey, London, must have been a place for lively and interesting discussions between friends and relatives. This was a time of innovation and great change.

In India, the young engineer Ernest Shadbolt built railways and bridges that would link distant lands together. Queen Victoria’s “Jewel in the Crown” developed at great human cost; newspapers reported unrest; rail routes and mighty bridges carried colonists across previously impassable rivers. Meanwhile in England, great strides in photographic technology were being taken by Ernest’s younger brother.

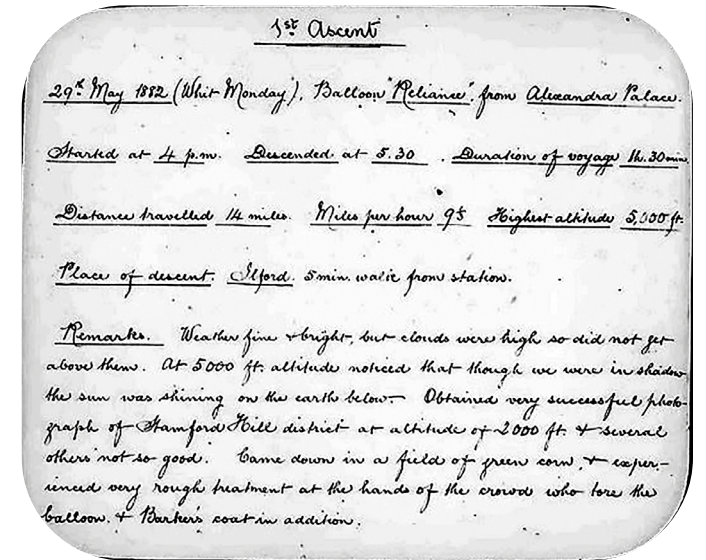


CECIL VICTOR SHADBOLT

Cecil, born in 1859, followed his father into the world of photographic innovation. His photographs of Welsh landscapes were displayed in the 1877 Photographic Society exhibition. In 1888, he travelled to Palestine and produced 24 photogravures for the Religious Tract Society. Like many wealthy young men of this time, he was quite the adventurer and took up the new and dangerous sport of hot air ballooning. From the 1860s, attempts at aerial photography had been made, but the cameras of that time could not overcome problems with vibration/ blurring and over-exposure. In 1882, equipped with an improved camera, extra - sensitive plates and a ‘rapid symmetrical’ lens that allowed the operculum (shutter) to open and close in a fraction of a second, Cecil Shadbolt had taken to the air over Stamford Hill and produced the first successful aerial photograph. Encouraged by his success, he took a half-share in a balloon with Captain W.D. Dale, (Picture, top: Cecil in the balloon basket and Captain Dale, right) made many forays into the skies with his camera. The Bromley Record reported on 1st August 1902:

“*Stamford Hill from the Air: Engraving from Shadbolt’s first aerial photograph...*”

This, An Instantaneous Map Photograph taken from the Car of a Balloon, 2,000 feet high was shown at the 1882 Photographic Society exhibition.”



Cecil Shadbolt's account (top) and his images of “old Surrey” on glass slides: the Wandle at Beddington (centre) and Sutton. The route would have passed over today's Surrey and in all probability, the Parish of Cuddington.

park during heavy rainfall, keeping the pond and part of the meadow area damp. This helps amphibians Frog, Toad and Smooth Newt, to move around on land and hunt for food. Toads arrive here to mate as early as January.

THE FUTURE

Recent plantings include a pollinator patch and a Swift nesting Tower designed by Will Nash. Saturday is 'task

morning' when areas of the park are tidied up - sometimes with the help of Epsom and Ewell Borough Council Ranger team. We have seen new trees planted in the Paddock area and by Edenfield entrance of Shadbolt park.

A memorial Oak tree for pilot, motor mechanic, Formula One Marshall and local Councillor Robert Foote and his wife Rosemary stands in the meadow area. Future plans for the meadow include a collaborative project with Surrey's Wildflowering Project to include native plants of value to wildlife in the park.

A bug box project for local youngsters is planned for the new meadow, alongside further bat boxes and nest sites for Kestrel and Tawny Owl.

Our yearly events raise money for projects like the childrens' playground in the park itself.



Cuddington Residents' Association and other volunteer groups raise money every year with the Shadbolt Park Big Day Out & Dog Show, taking place in 2024 on 15th June.

Ernest Shadbolt's Daylily collection is open for public view on the day and weekends during July and August.

BIG DAY OUT

**SAT. 15th JUNE 2024**
SHADBOLT PARK KT4
Sponsors, stallholders, performers
& volunteers: crabdo2024@gmail.com

DOG SHOW ★ LIVE ACTS ★ FOOD ★ RIDES ★ STALLS

FURTHER READING

https://cuddingtonparish.org.uk/stmarys_history.html

<https://cuddingtonra.org/shadbolt.html>

WHERE WE ARE

Shadbolt Park House, Salisbury Road, Worcester Park KT4 7BX

Nearest station: Worcester Park, (Dorking, Guildford or Waterloo) 15 minute walk to Shadbolt Park

Bus: E16 from Epsom, 213 from Kingston and Sutton