## Clarence Bicknell - a Mountain Botanist

By Marcus Bicknell

for the conference « Des Botanistes aux Sommets » organised by « L'Acadèmia Nissarda, les Amis du Muséum D'histoire Naturelle De Nice, en partenariat avec Le Muséum D'histoire Naturelle de Nice » at the Palais de l'Agriculture in Nice, Saturday 19th November 2022.

A presentation of the articles in the related journal Nice Historique of July-December 2021

I have read with great interest the edition of Nice Historique with the celebrated botanists who found the Maritime Alps and their flora so fascinating. I congratulate Acadèmia Nissarda and its experts present here today for their research and for bringing these scientists into the public eye.

How did Clarence Bicknell get to be among this celebrated group?

I have been researching since the 80s my great-grand-uncle's life. I find no evidence that he ever climbed a mountain before he was 45 years old. Unlike his adventurous brothers, he was a mild man, devoted for the first 15 years of his career to the God and his parishioners. Soon after he settled in Bordighera in 1878 and left the church, Clarence began excursions in the surrounding area where he collected flowers, took them home to dry as herbarium specimens, and recorded them in water-colours paintings. He largely ignored the mountains towering in the hinterland, and spent all his time botanising on the Italian and French Riviera, Liguria, Corsica and the lakes of Switzerland

## Clarence as a child and Botany

But baby Clarence was introduced to flowers before he could read or write. It was the habit of his elegant and artistic mother Lucinda to take him for daily walks in the park around their house south of London to look for wild flowers. Lucinda came from an artistic family - her nephew was Phiz the illustrator of Charles Dickens books - and she taught Clarence how to draw and paint the flowers they found. And so it was that during his time in the church, Clarence was able to take time off to walk in the country and record God's gift to mankind, nature. Lino Vaccari called Clarence "the dear apostle of beauty and goodness".

### Clarence Bicknell - Citizen Scientist

He became interested in the whole process of botanising, that is, exploration, discovery, collecting, recording in drawing and watercolour, publication of his finds, herbaria (the pressing of plant and flower samples), the study of the common and Latin names, the geography and environment of each, their taxonomy and the relationships between various flower species.

Prof. Mauro Mariotti<sup>1</sup> describes Citizen Science in his paper "Clarence Bicknell Citizen Scientist" as "scientific activity in which non-professional scientists voluntarily participate in the collection and analysis of data, the development of technologies, the evaluation of natural phenomena, and their dissemination. A Citizen Scientist is active in a discipline for pure delight. The consistent and qualified activity of enthusiasts of botany has made significant contributions to botanical knowledge, in particular regarding the distribution and ecology of plants". Clarence certainly worked on botany for pure delight.

The breadth of his skills in botany put him in a good position when he arrived in Bordighera in 1879, and left the church, to apply his talents to the extraordinary flora of the Riviera. By 1884 he had completed over a thousand watercolour drawings of wildflowers, from which he redrew 82 onto lithographic plates to use as coloured illustrations in his own work, *Flowering Plants and Ferns of the Riviera and Neighbouring Mountains*. This luxurious volume, with notes on 280 species, colour plates with tissue paper interleaves and gilded sheet edges, was published by Trübner in London in 1885.

Clarence's book *Flowering plants and ferns of the Riviera* and neighbouring mountains (London, 1885) included 82 coloured plates from his paintings, and notes on 280 species. (right, Crocus, Plate LXV).

In his Flora of Bordighera and San Remo (Bordighera, 1896) Clarence wrote 'There is no part of this district which may not be visited by a good walker, with the assistance of a carriage, within a day's excursion, and by an early start one may be among the larches, the gentians and the Edelweiss on a summer morning, and in the evening gather Oleander and Pancratium near the sea. It would be difficult to find another region of equal size with a richer or more varied flora'. He was





<sup>&</sup>lt;sup>1</sup> Prof. Mauro Mariotti, Professor of Environmental and Applied Botany, Università degli Studi di Genova, Dipartimento di Scienze della terra, dell'ambiente e della vita (DISTAV), and director of the Hanbury Botanical Gardens

<sup>&</sup>lt;sup>2</sup> www.clarencebicknell.com/images/downloads\_news/clarence\_bicknell\_citizen\_scientist\_mariotti\_2019.pdf

focussed on botanising within a day's trip from the coast.

# Up into the mountains

Clarence first went up the Roya valley to St Dalmas in 1879; he ventured into the slopes above Les Mesches but there was too much snow to see anything. In 1881 and 1883 he extended into these mountains his search for wild flowers; for two years he obsessed about the family Ranunculaceae<sup>3</sup> and climbed high in the Mercantour and Val Pesio to find samples. On 6 June 1883 he made his first ascent to the Val Casterino (1,560 metres), a walk of three hours from Tende. In 1888 he began regular visits to the Valle di Pesio where San Bartolomeo was his base for botanical excursions.

Aquilegia Alpina, family Ranunculaceae. Water colour in the Casa Fontanalba Visitors' Book (1906)

When he did discover the majesty of the Alps, just a few hours' drive by coach from Bordighera, I fancy that over the ten years from 1886 his spirit soared as his altitude above sea level increased. In 1897 he draws many mountains round the Fontanalba and the Merveilles as the principal subject of his water colour landscapes, as if he was noticing them for the first time. From 1897 there was hardly a summer when he was not up at Casterino. By 1906 he had built his own house there, the Casa Fontanalba.

## The rock engravings - a diversion

In the summer of 1897, Fritz Mader, the botanist who is the subject of the research by Graham Avery presented today, alerted Bicknell to the engravings of the Val Fontanalba. Thenceforward, during the many summers in which Bicknell explored, copied and catalogued 11,000 rocking engravings, his eyes and his thoughts were always drawn towards the extraordinary flowers of the mountains. On a typical day he would get down from the mountains at 4 o'clock, work with Luigi Pollini on perfecting and filing rock engraving copies then spend some time on painting a few flowers before dinner time.

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<sup>&</sup>lt;sup>3</sup> Buttercups, Anemones, Delphiniums, Aquilegias and Clematis are in this family. Many watercolours of the same species done in 1881 and 1882 in the University of Genoa such as Hellebore, Geranium, Aquilegia of which an example is at https://clarencebicknell.com/aquilegia-alpina-in-the-casa-fontanalba-visitors-book/

## Botany - my special hobby

Clarence apologised<sup>4</sup> for forsaking botany in favour of the engravings. 'I am only an amateur botanist, and have gone up into these neighbouring mountains in my summer holidays in order to study their Flora; but the fascination of the rocks has made me neglect my special hobby; and I have spent the greater part of my time in making drawings and taking notes of the rock figures'.

Some of the flowers were the stuff of dreams. *Saxifraga florulenta* is the most rare and the most sought-after plant and is referred to by Bicknell as The Ancient King, l'Antico Re, an object of reverence and worship. He does not write specifically of the flowers and plants of the mountains as the work of God but everything he writes and draws tells us he thinks of them as the most sublime gifts and part of his calling.

Saxifraga florulenta, watercolour by Clarence Bicknell

Clarence loved wildflowers over the garishness of garden and other cultivated flowers. "This is the supreme moment when I look at my garden and marvel.... I would not exchange this

scrap of bank for all of the garden in Peradeniya, Ceylon, or that in Java or Kew..... what a blaze of colour. Every day I think I have never seen anything quite so beautiful... I keep saying so to the others. Maddalena [his cook] must consider me to be crazy." (10 July 1914)

#### The Casa Fontanalba

His love of the mountains became so intense that he constructed his own house at Casterino, at an altitude of 1550 m, just a bit below the tree line, and opened his doors to eminent archaeologist and botanists. The Casa Fontanalba became a magnet for his network of scientist friends, with the botanists being the greatest number. His illustrated Casa Fontanalba Visitors Book, signed by each of the visitors, and the Book of Guests in Esperanto<sup>5</sup>, in which Clarence writes a few words about each, give us an accurate list of those who went there and starting points for cross-referencing the further work of each of them on the botany of the neighbouring mountains.

#### A network of botanists

In the winter months, Clarence devoted himself to collating and writing up his summer's finds

and corresponding with experts all over Europe; many of the collections of letters are available to researchers.



<sup>&</sup>lt;sup>4</sup> Preface to *The prehistoric rock engravings in the Italian Maritime Alps* (Bordighera, 1902)

<sup>&</sup>lt;sup>5</sup> Both books are in print and available at this conference and at www.clarencebicknell.com/shop

In his book of 1896 Clarence wrote 'I greatly wish that more of our winter visitors, both at Bordighera and San Remo, would send me the plants they find, however common... I shall always be grateful for specimens, as well as corrections of any of the numerous errors into which I have probably fallen, in this extreme corner of Italy with only a small botanical library and far from Herbaria and from fellow-workers'.

Clarence made many botanical acquaintances. In the Preface of his 1885 book he thanked particularly his friend **Francesco Panizzi** of San Remo, and other botanists at Pisa, Genoa, Turin, Geneva, and the President of the Linnaean Society in London.

Clarence's most important botanical friendship was with **Emile Burnat** (1828-1920), whose monumental *Flore des Alpes Maritimes*, published in Geneva from 1892 onwards, has many citations of Bicknell. We know from the *Casa Fontanalba Visitors' Book*, that **Emile Burnat, Reginald Farrer, H. Stuart Thomson, Henri Correvon**, and other botanists visited him there.

Although Clarence was not a friend of Sir Thomas Hanbury (1832-1907), he collaborated with **Alwin Berger** (1871-1931) who was Curator of the Hanbury Gardens from 1897 to 1914. Clarence met **Ellen Willmott** in 1901 at Hanbury's gardens; later her impressive gardens cascaded down a cliff at Boccanegra, two miles away from Hanbury, and she enjoyed working and corresponding with "a man of intellect and stature who shared her own interest".

Clarence Bicknell's *Book of Guests in Esperanto* gives brief profiles of eleven botanists and three accompanying persons who stayed overnight at Casa Fontanalba...

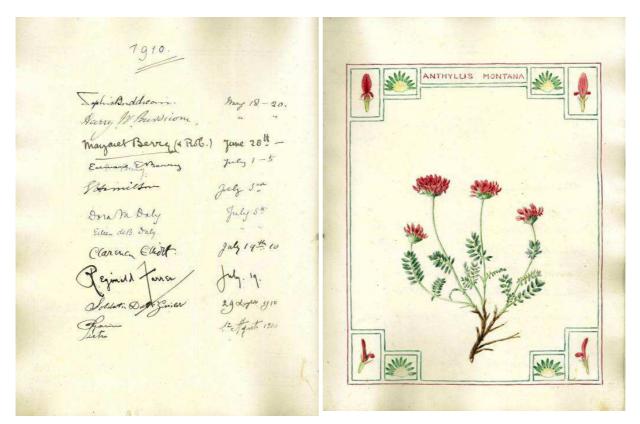
- 1. **Fritz Mader** (1906)
- 2. C. Werner (1906) accompanying his friend Fritz Mader
- 3. Harold Stuart Thompson (1907)
- 4. **Lino Vaccari** (1908)
- 5. **Emile Burnat** (1909)
- 6. Jean Burnat (1909) accompanying his father Emile
- 7. **E. Wilczek** (1909)
- 8. **John Briquet** (1909)
- 9. François Cavillier (1909)
- 10. **Emile Albrezol** (1909)
- 11. **James W. White** (1911)
- 12. Cedric Bucknall (1911)
- 13. **Abbie Bucknall** (1911) accompanying her husband Cedric
- 14. Renato Pampanini (1916)

Bicknell also kept a separate *Casa Fontanalba Visitors' Book*, signed by all his visitors including those who did not stay overnight. Among these were thirteen other botanists:

- 15. Reginald Farrer (1910)
- 16. Clarence Elliott (1910)
- 17. Louis Lutz and eight others (1910)
- 18. Henry Correvon (1914) and
- 19. **Théodor Katz** (1914)

There are other records of Clarence's significant contacts with...

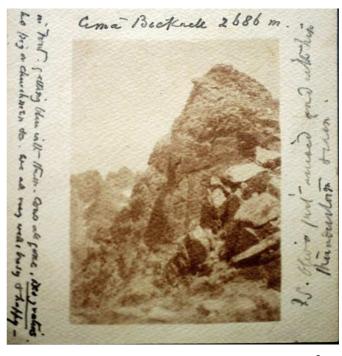
- Augusto Béguinot (1875 1940), Director of the Istituto Botanico at Genova.
- Clarence Elliott (1881-1969) collector and writer on alpine plants,
- Reginald John Farrer (1880 –1920) traveller and plant collector
- **Stefano Sommier** (1848-1922), Italian botanist



# Clarence's output

As a result of Clarence's life-long work and his participation in botanical exchange networks, specimens collected by him are conserved in many other places. Our research shows; 22,749 plant specimens he pressed and preserved, stored in 21 herbaria in Europe and the USA; 4,674 of his botanical drawings; 4,528 full-size rock engraving copies; and other artefacts making a total of 38,756 items conserved in 50 museums in a dozen countries.

# A mountain named after Clarence Bicknell

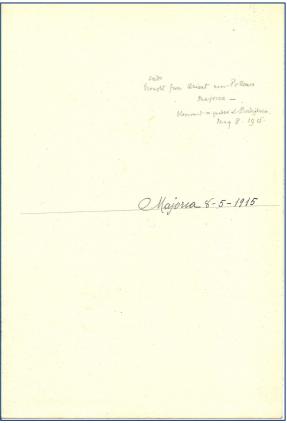


On 5 May 1908, he told Burnat that Fritz Mader had named a peak above Val Fontanalba 'Cima Bicknell' in his honour. In 1908 Fritz Mader published in the Rivista Mensile of the Club Alpino Italiano an article describing his excursions in the Maritime Alps in 1906; these included finding a minor summit of about 2,600 m. just east of the Lac du Basto. above Val Fontanalba, which he decided to name after Clarence Bicknell 'who with much patience for several years has explored, copied and illustrated the many prehistoric rock inscriptions in the surrounding area.' Situated between Mont St Marie and Mont Bégo, at 2,600 metres, the little peak was, according to Clarence 'très peu de chose', commenting to Burnat: 'I believe (between you and me) that it's hardly worthy of a name, and will not render me more illustrious, but at least I'm happy that you're not the only one in the Maritime Alps to have your own peak.'

### Plants named after Clarence Bicknell

During explorations in the Balearic Islands in the late 1890s, Clarence gathered near Pollenza (Majorca) an *apiacea* that Briquet described in 1898 as *Pimpinella bicknelli*, a species considered still valid today. The watercolour below is in the collection of the University of Genoa.





The list of eponyms in honour of Clarence Bicknell<sup>6</sup> includes 9 taxonomic units, two of which are hybrid in nature:

<sup>&</sup>lt;sup>6</sup> With thanks to Prof. Mauro Mariotti who publishes this list in his paper at www.clarencebicknell.com/images/downloads\_news/clarence\_bicknell\_citizen\_scientist\_mariotti\_2019.pdf

- *Pimpinella bicknellii* Briq.;
- *Hieracium bicknellianum* Arv.-Touv. ex Murr, Zahn & Poell;
- Rhaponticum helenifolium Gren & Godr. subsp. bicknellii (Briq.) Greuter; Symphytum × bicknellii Buckn.;
- Polystichum bicknellii Hahne;
- Dorycnium bicknellianum A. Berger & Dinter;
- Anacamptis × bicknellii (E.G.Camus, Bergon & A.Camus) B.Bock;
- Euphrasia bicknellii Wettst. in Bickn.;
- Pedicularis bicknellii Sommier.

These are taxa considered accepted or unresolved, but not fallen into synonymy.

Clarence Bicknell's direct contribution to taxonomy concerns two units: *Cirsium* × *norrisii*, published in 1894 on Malpighia, and *Hieracium prasinellum*, published together with Karl Hermannn Zahn in 1907 on *Icones Florae Germanicae et Helveticae*. Both are considered unresolved by *The Plant List* (the first erroneously reported as *Cirsium x morrisii*). Several others are the taxa described on samples collected by C.B. and transmitted to the specialists of the time. Checks on samples and other original documentation would be especially appropriate especially for taxa that *The Plant List* considers unresolved.

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Clarence Bicknell considered botany to be his special hobby. As a "Citizen Scientist" he was able to contribute significantly to the knowledge of flowers and plants, especially those of the mountains on the southern border of France and Italy. His industry and talent as a mountain botanist leave a lasting legacy.

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I offer my thanks to those from whose work I have drawn here, including Graham Avery, Peter Bicknell, Susie Bicknell, Christopher Chippindale, Valerie Lester, Professor Mauro Mariotti

#### **Annex**

## Clarence Bicknell and Botany - Articles published on the Association's website

General information

https://clarencebicknell.com/botanist/

Research papers available on clarencbicknell.com

https://clarencebicknell.com/documents/

Biographical note on Clarence Bicknell by Augusto Béguinot (1931)

http://www.clarencebicknell.com/images/downloads\_news/beguinot\_article\_on\_clarence\_bicknell\_note\_avery\_jan2015.pdf

Clarence Bicknell's meeting with Reginald Farrer (1910)

http://www.clarencebicknell.com/images/downloads\_news/obh12\_avery\_\_\_bicknell\_and\_far\_rer\_v4.pdf

Clarence Bicknell's correspondence with Emile Burnat (1886-1917)

http://www.clarencebicknell.com/images/downloads\_news/burnat\_letters\_from\_bicknell.pdf Clarence Bicknell's Botanical Exchanges

 $\underline{http://www.clarencebicknell.com/images/downloads\_news/clarence\_bicknell\_botanical\_exch\_anges\_avery.pdf}$ 

Herbarium specimens and other material from Clarence Bicknell at Kew Gardens, London <a href="http://www.clarencebicknell.com/images/downloads\_news/kew\_clarence\_bicknell\_avery.pdf">http://www.clarencebicknell.com/images/downloads\_news/kew\_clarence\_bicknell\_avery.pdf</a> Herbarium specimens from Clarence Bicknell at Oxford Herbaria

 $\underline{\text{http://www.clarencebicknell.com/images/downloads\_news/oxford\_herbaria\_clarence\_bicknell.pdf}$ 

Herbarium specimens from Clarence Bicknell at Belgium's Botanic Garden

http://www.clarencebicknell.com/images/downloads\_news/belgium\_bicknell\_avery.pdf

Clarence Bicknell and Iridomyrmex bicknelli

http://www.clarencebicknell.com/images/downloads\_news/iridomyrmex\_bicknelli\_avery.pdf

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