# Augustine Henry and the Exploration of the Chinese Flora

# E. Charles Nelson

The plant-collector's job is to uncover the hidden beauties of the world, so that others may share his joy . . . .

— Frank Kingdon Ward, From China to Hkamti Long

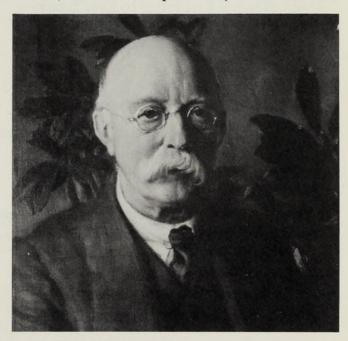
Although he is generally believed to have been born in Ireland, Augustine Henry was born in Dundee, Scotland, on July 2, 1857. His father, Bernard, was a native of County Derry in the North of Ireland, and his mother was a local girl, Mary MacNamee. She met Bernard Henry while he was visiting his married sister, who lived in Dundee. After their marriage, and shortly after Augustine's birth, Bernard and Mary Henry returned to Ireland with their son and settled in Cookstown in County Tyrone. Bernard owned a grocery shop in the town and also bought and sold flax.

Austin, as Augustine was called, went to Cookstown Academy. He was a brilliant scholar and eventually gained a place in the Queen's College, Galway, where he studied natural science and philosophy; he graduated in 1877 at the age of 20 with a first-class degree. In the following year he obtained a Master of Arts degree at the Queen's College in Belfast. After that he spent a year in London studying medicine in one of the teaching hospitals. During a visit to Belfast about 1879 he met Sir Robert Hart, who recruited him for the Imperial Maritime Customs Service in China. Henry completed his

studies as rapidly as he could, obtained his medical qualifications, passed the Chinese Customs Service examinations, for which he had acquired a working knowledge of Chinese, and left for China in the autumn of 1881.

Henry remained in the customs service until the end of 1900, during which time he made considerable collections of the native Chinese flora. Ernest Wilson is reported to have said that "no one in any age has contributed more to the knowledge of Chinese plants than this scholarly Irishman," and in

The portrait of Augustine Henry in this photograph hangs in the National Botanic Gardens in Dublin, Ireland. It was painted by Celia Harrison.



1929 the second fascicle of *Icones Plan-tarum Sinicarum* was published in Beijing (Peking) with the following dedication:

Augustine Henry through whose assiduous botanical exploration of Central and South-Western China the knowledge of our flora has been greatly extended.

Other botanists shared these opinions, although Arthur Grove commented that Henry "was more concerned in botanical exploration than in horticultural exploitation, and thought more of getting a specimen safely to Kew than of getting the seeds which might enable the particular plant to be raised" for cultivation in the British Isles. But that is an unfair comment. Henry was not oblivious to horticultural potential, but because he was occupied by his work at the customs office he could engage in the task of plant hunting and seed collecting only in his free time. Seed collecting was, and still is, a time-consuming task, requiring two visits to a habitat, one to collect the plant in flower for identification and a second to obtain ripe seeds. Henry's first letter to Kew accompanied seeds of the lacquer tree (Rhus verniciflua) and in the next few years he sent other seeds, including Camellia eurvoides. Rosa banksiae, Buddleia davidii, and a linden (Tilia tuan). On leaving Yichang in March 1889 he brought with him bulbs of an orange-flowered lily, which he gave to Charles Ford, who forwarded some to Kew; this was the Henry lily (Lilium henryi), which is widely cultivated in gardens today (and has the advantage of being a lime-tolerant species).

## Henry in China

For the first few months of his time in China, Henry was stationed in Shanghai. In

March 1882 he was assigned to Yichang ("Ichang" in Henry's correspondence), a port on the Yangtze River, about a thousand miles inland, near the borders of Hubei and Sichuan provinces. There he served as the assistant medical officer and also performed customs duties. For a while he spent his leisure time on shooting trips in the nearby countryside, but he was a poor shot and in 1884 he began to pursue less mobile creatures: plants.

In his diary he recorded his first botanical excursion on November 25, 1884, when he crossed the river at Yichang and collected some plants near the village of Shiliujing. On March 20, 1885, he wrote to the director of the Royal Botanic Gardens at Kew, saying that a number of medicinal plants were cultivated around Yichang. He reported that "there seem to be a fair number of interesting plants; and as this part of China is not very well known to botanists interesting specimens might be obtained." Henry confessed that he knew very little of botany, but he offered to collect specimens and send them to Kew "if you think they would prove useful."

About the same time he wrote to a Dr. Wales regarding botanical work. His letter was passed on to Henry Hance (1827–1886), who was one of the leading experts on the Chinese flora at that time as well as British vice-consul in Canton. Hance replied on April 1, 1881, suggesting some useful books and recommending that "in order to work at so novel and comparatively unknown a flora in a tolerably satisfactory manner, a student

The Henry honeysuckle (Lonicera henryi).

Drawing by Michael Grassi.



ought to have a fairly good herbarium and a very considerable library, with all the important systematic monographs and memoirs on families & genera." He suggested to Henry that "any person with a love of botany can do invaluable service even by collecting, whilst both leisure and want of pecuniary means may render it impossible for him to attempt to attack the study" on a large scale.

The value of that advice to Henry may be gauged by the fact that the letter in which it was written and a second one containing a recipe for an insect repellent to preserve herbarium specimens are the only letters that survive among Augustine Henry's papers from his first tour of duty in China. Not even the reply of Sir Joseph Hooker, director of Kew, survives from the voluminous correspondence that Henry conducted with botanists after 1885.

Having been advised by Hance, and undoubtedly encouraged by Hooker, Henry began to collect assiduously and thereby "to open the treasure chest of the Chinese flora."

Other botanists, amateur and professional, had collected at Yichang before, but because they were eclipsed by Augustine Henry, their work is little known and their collections do not seem to amount to much. Charles Maries (c. 1851–1902) was sent to China by James Veitch, the famous London nurseryman, in 1879. According to Veitch he lacked staying power and did not get on well with the Chinese, who resented his "difficile" nature and destroyed his collections. Thus Maries returned to England with very few plants. Unlike Henry, Maries was on a commercial expedition; he was not a leisured explorer without deadlines or con-

straints. He had to be single minded and collect seeds and bulbs of plants that would be profitable for his employer. Maries did make some notable discoveries at Yichang, including the Chinese witch hazel (*Hamamelis mollis*), which was raised from his seed by Veitch but grew unrecognized in the London nursery for almost 20 years.

Another person who collected at Yichang before Henry was Thomas Watters, by coincidence also Irish. The coincidence is more remarkable in that Watters was the brother of Augustine Henry's sweetheart, Harriet Watters. Harriet turned down Henry's proposal of marriage but corresponded with him for many years while he was in China. Thomas Watters was a scholar with a special interest in Chinese Buddhism, and he was a member of the British consular service in China from 1863 until 1894. In 1878 he was appointed acting consul in Yichang and during his free time collected herbarium specimens for Hance. Watters also responded to a request made by the authorities at Kew for materials on economic botany; at Yichang he discovered the service viburnum (Viburnum utile), which was used for making pipestems. His other notable find was the Chinese primrose (Primula sinensis). Watters sent some living plants to Charles Ford at the botanical garden in Hong Kong, but does not seem to have sent seeds or living plants to the British Isles. It is said that Watters and Henry met in China, but no documents describing such a meeting exist.

Augustine Henry, therefore, was in virtually unexplored territory. It was an area of outstanding botanical riches, "the Klondike of plant gold." Between November 1884 and February 1889 Henry discovered about 500 species new to Western scientists, about 25

new genera, and one plant, Trapella sinensis, that is now in a family by itself, the Trapellaceae. He made use of native collectors, whom he trained to bring dried specimens to him, although they were not as productive as Henry wished. He combined the collection of herbarium specimens with studies of ethnobotany and recorded the vernacular names and uses of plants, especially those used in Chinese folk medicines. Indeed, his interest in botany was aroused by the difficulties of reconciling European scientific names and the many vernacular names for Chinese medicinal plants.

On June 20, 1891, during home leave, Henry married Caroline Orridge, the daughter of a London jeweler, and returned to China later that year. In November 1896. while stationed in southern China at Mengsi ("Mengtze" or "Mengtse" in Henry's letters). he wrote to Evelyn Gleeson, a friend from his student days in Galway, saying that he had received "very enthusiastic letters from a Liverpool merchant," Arthur K. Bulley. Henry promised to send him seeds but commented to Evelyn Gleeson that

the difficulty is in selecting. I like plants with beautiful foliage and neat little flowers. I don't care for colour much. I think chrysanthemums are positively ugly on account of their wretched leaves. The Rose is an exception: it is wonderfully beautiful in every way. As for Geraniums, I really can't understand any one liking them. Ferns of all kinds please me. They are simply marvellous here, especially the kinds that one gets in the virgin forests. Their variety of form is astonishing.

Despite his reservations and his own pleasure in form, not color, Henry did collect seeds and also some epiphytic orchids. In January 1897 he wrote to Evelyn Gleeson saying that he had sent seeds to Bulley "but

there was nothing in them suitable for you to plant. I must get you something soon." A few weeks later, as promised, Augustine Henry sent a "box containing 3 kinds of orchids (I haven't seen the flowers) procured on . . . trees at 7000 [feet]. If they arrive viable and plantable, please take half of each kind and send the other half" to Bulley. Henry said that the orchids should grow in England, advising Miss Gleeson not to "throw them away: but try them, as they have astonishing vitality. Consult some one who knows: and give me suggestions if necessary re collecting & sending similar orchids."

Henry sent additional batches of seeds to Kew. In one letter to Evelyn Gleeson on December 21, 1898, he wrote that he had sent William Thistleton-Dyer, Hooker's successor as director of Kew, "a lot of seeds: and he gave them to the girl gardeners to grow: and these dears succeeded in raising 45 kinds (already) including 6 species of Begonia & some other beautiful plants as a new species of Rogersia, . . . also Rhododendrons (3 or 4)." These seedlings had perhaps a better chance of surviving than the orchids sent to Miss Gleeson, yet the number of plants said to have been introduced by Henry is generally considered to be small.

While his introductions may be few, Augustine Henry's discovery of new species and his botanical work in poorly known areas was significant. W. Botting Hemsley estimated that while in China — at Yichang, on Hainan, in Taiwan, at Mengsi, and Simao — Henry and his native helpers acquired over 15,800 collection numbers. As there were an average of 10 specimens in each there must have been a total of almost 160,000 herbarium specimens. Henry collected probably over 5000 species between

1884 and 1900. His contribution to Chinese botany may be measured crudely by noting the many species with the epithets augustinii or henryi: Henrya augustinii, Rhododendron augustinii, Emmenopterys henryi, and Lonicera henryi. Carolinella henryi was named for his wife, Caroline.

## Henry's botanical contacts in China

One of Augustine Henry's first contacts in China was Lord Kesteven (1851–1915), who visited Yichang in April 1886 and probably accompanied Henry on a trip upstream through the famous Yangtze gorge near the city. Kesteven went with Henry many years later on excursions to forests in France and sponsored his journey to the western United States in the early 1900s. He was one of the select group who received seeds from Augustine Henry during his first tour of duty, and it was through him that Henry introduced the sweetspire (*Itea ilicifolia*) into cultivation in the British Isles.

No doubt Henry's enthusiasm was stimulated by the letters he received from Kew telling him of the significance of his discoveries and enclosing numerous articles and papers containing descriptions of his plants. Unfortunately, none of these letters, written by William Thistleton-Dyer, Daniel Oliver, and William Hemsley, is extant, so it is not possible to judge accurately how much Henry was inspired by them. During his home leave in 1890, Henry certainly must have been encouraged by his visit to Kew, where he was greeted as a celebrity, the man who had in 1886 sent "one of the most important plant collections ever received from the centre of China" and who continued to astound botanists with every new parcel of

plant specimens. He soon tried to pass on his enthusiasm to others.

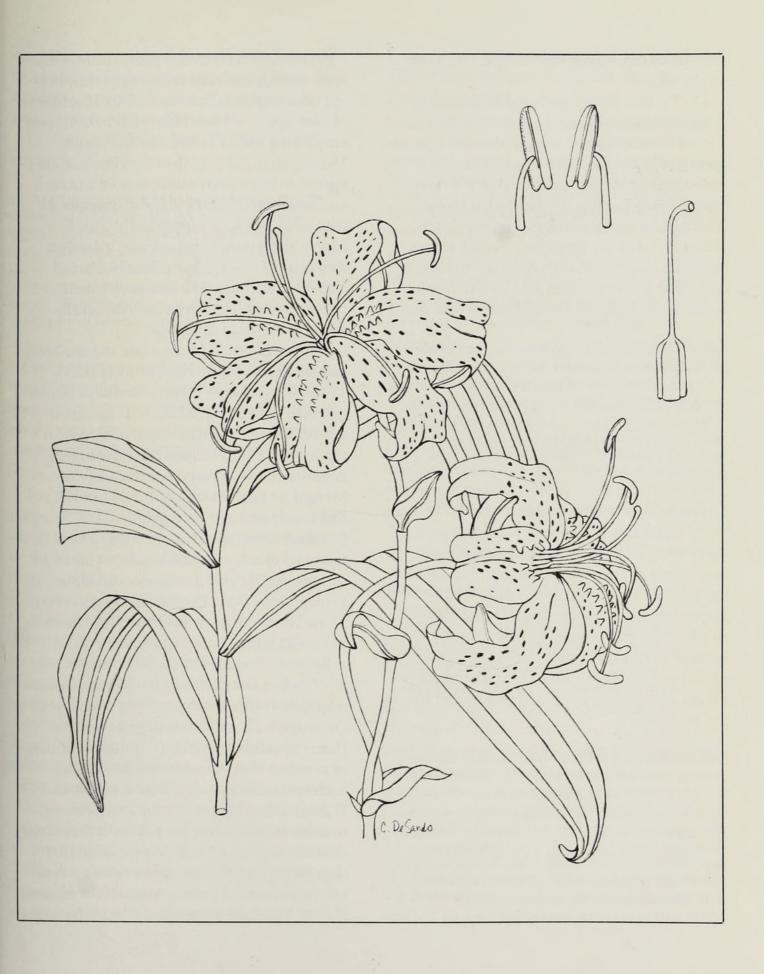
During his early years in China, Henry was learning and being guided. He returned to China in 1892 more confident and prepared to encourage others. In 1893 he published *Notes on the Economic Botany of China*, in the preface of which he wrote:

Missionaries and others living in the interior are often in a position to make enquiries concerning the natural productions of China, the results of which would be of great service to science. I intend to publish a few notes, pointing out the directions in which such work might be done as regards articles derived from the vegetable kingdom; for I think a vague idea that everything is known, prevents many people from taking an interest in natural history. Scarcely anything is known in regard to many points of economical interest. If any one wishes to help, he will confer a great favour on the writer by sending him specimens of dried plants, drugs, woods, dyes, etc. These specimens will be forwarded when necessary, to England, to have them dealt with by the authorities at Kew.

Henry continued with instructions on the preparation of herbarium specimens, which were almost word for word what Henry Hance had told him nearly nine years earlier in the only letters he kept.

Henry did not confine his interests to economic botany, however, nor did he attempt to restrict the people he helped and encouraged. In October 1892 he was assigned to Dakou on the island of Taiwan (Formosa); he had applied for the transfer in the hope that the climate would suit his wife, who was in failing health with tuberculosis. Caroline Orridge Henry died two years later in Den-

The Henry lily (*Lilium henryi*). Drawing by Cynthia DeSando.



ver, Colorado, where she had gone because of the illness.

On Taiwan Henry gathered information for a flora of the island. In May 1893 he contacted Hosea Ballou Morse (1855-1934), a graduate of Harvard University and a commissioner in the customs service who was stationed at Tamsui. He reminded Morse that he had sent specimens of wild hempskin cloth and the plant from which it was manufactured to Shanghai the previous year; the plant had been identified as an Alpinia species. On May 15, 1893, Henry wrote that

from letters received from Kew, asking for specimens in flower, it appears that it is a new species . . . I should be much obliged if you would kindly cut off the flowers, put it in a bottle in spirits of wine, and send to me. . . . I am doing my best here to get at the products of the vegetable kingdom and have a native . . . collecting for me in the mountains.

In fact he had several people working for him; under the guidance of Mr. Schmuser, a lighthouse keeper, "the savage chief Capting" made a large collection in the south of the island. On June 6, 1893, Augustine Henry replied to a letter from Hosea Morse in which Morse had mentioned the problems of customs officials with plants and plant products listed under Chinese names. Henry said that he could not tackle that for the present:

One must remember that the framers of the tariff were ignorant of botany, textile fibres and such like . . . such work as identifying drugs, fibres, dyes &c, can only be done very gradually and by accumulation of specimens of the plants and information got at first hand. It also requires an expert, one who knows Chinese and has an acquaintance with common vulgar names in Chinese, with Chinese books &c, else the ordinary observer will be taken in.

A few days later Henry provided Morse with instructions about drying plants, noting that he generally obtained six specimens of each species. Later Henry advised him on employing native collectors. In August Morse promised to collect for Henry. Henry agreed to pay a native collector \$8 a month and instructed that he should bring plants into Tamsui twice a month if possible. Morse's assistance was acknowledged by Augustine Henry in his published list of Taiwanese plants. The two men continued to correspond for many years, especially while Henry was in Mengsi.

Henry arrived in Mengsi late in June 1896 and there met Pierre Bons D'Anty (1859-1916), who was the French consul in Simao (Ssemao or Szemao in Henry's correspondence), a city in southwestern China near the border with Vietnam (then French Indochinal. Bons D'Anty was probably in Mengsi on business. They could not have had much contact, for the consul left Mengsi five days after their first meeting. These two men had much in common; they shared an interest in Chinese literature, and Henry regarded Pierre Bons D'Anty as "very clever." Their brief contact was enough for Henry to persuade him to collect plants at Simao.

Between August 1896 and November 1897, when Bons D'Anty left Simao, he corresponded with Henry and sent specimens. On August 22, 1896, Bons D'Anty sent to Henry specimens of plants "found common or peculiar" between Mengsi and Simao; each specimen was numbered, and Bons D'Anty asked Henry to refer to the "same number when telling me the identification that you arrive at." It is evident from this that Henry had become more than a collector; he was now a botanist capable of naming plants. Yet there were some species he could

not identify, and these were sent to London. Over the following year Henry and Bons D'Anty corresponded about conifers, tea, and Chinese vernacular names.

In June 1897 Pierre Bons D'Anty wrote that

for nearly two months I have not been out of my office and I was busy till the middle of every night. I hope you will excuse me. I thought of writing to you but I couldn't find a minute to do so. . . . I have some 250 or 300 specimens, some very curious, collected during my trip in the Lipsing [?]. I am going to pack them all right and send them to you as soon as possible.

He sent Henry a photograph of a palm that was very common in the Lipsing area; "it is seen around every pagoda and the leaves are used to make paper with, or rather they are used as paper, being cut into long stripes [sic]."

As he could not make herbarium specimens of the huge leaves, Bons D'Anty thought the best way to convey the information was by photographing the plant. He remarked that the Chinese called the palm Mien i chou. In a subsequent letter Bons D'Anty showed that he had some botanical expertise himself, by saying that the palm was not a species of Chamaerops, Livistona. Arenga, or Borassus. Henry sent the photograph to Kew and the palm was identified as "probably Trachycarpus sp." In all, Pierre Bons D'Anty sent Henry about 500 specimens before he left Simao. These were incorporated into Henry's collections and sent to Kew. They gave Henry a good preliminary knowledge of the flora of that region, where he was to be sent in 1898.

While corresponding with Bons D'Anty in Simao, Henry remained in contact with Hosea Morse, who had been transferred to

Longzhou in Guangxi province. On April 30, 1897, Henry informed William Thistleton-Dver that he had

received from Morse . . . some 400 species. Some are quite interesting. He sent me Tournefortia sarmentosa, which is hitherto known only as an oceanic plant. . . . He also sends me Dolichandrone cauda-felina, which I found on the Red River. Its pods are the most comic of fruits; long tail of some prehistoric animal would be near it.

Earlier in the year he had written to Hosea Morse saying that Professor Charles Sargent of the Arnold Arboretum had written asking for seeds of "mountain shrubs and trees. Perhaps you could co-operate if you get off at all to the mountains." Henry expressed his gratitude for Morse's assistance with the Taiwanese flora: "I am very grateful to you for your collecting for me: and you can send at your convenience. I expect you will have quite a lot of novelties. Every place in China has some; and they often are the commonest plants of the locality."

# Henry and Bulley

It was while in Mengsi that Augustine Henry began his correspondence with the Liverpool merchant Arthur K. Bulley (1861–1942). Bulley, the founder of Bees Nursery, was an insatiable horticulturist with a passion for introducing new plants into the British Isles. He had tried contacting missionaries in China to request seeds, a practice that was becoming common at that time among institutions and enthusiastic gardeners in Europe. However, Bulley was far from content with the seeds he received: his garden "could quickly claim to possess the best international collection of dandelions to be seen anywhere."

Bulley first wrote to Henry in 1896 and requested seeds, which Henry sent. In a letter to Evelyn Gleeson written in June 1897, Henry said that "I don't know [Bulley], but he wrote to me for seeds . . . . He is an enthusiast. I have a weakness for enthusiasts, cranks and the like." A fortnight later, he remarked in another letter to Miss Gleeson that "Mr. Bulley seemed satisfied with the seeds I sent him and wrote me a letter full of flattery and appreciation."

Unlike the missionaries, Henry seemed to be able to travel anywhere and collect worthwhile plants. On March 30, 1897, Henri Correvon of Geneva sent a letter in idiosyncratic English to Bulley seeking assistance:

"I allways wishes to hear that somebody would go [to Yunnan]. But Franchet says that only the Jesuits - those who take the protestant church built at Madagascar by English missionaries alone, the awful Jesuits can go there. Is your friend Henry the abbé Henry? — if so he will be able to get something as the people there is catholic. Franchet says even that they are very much against protestants. Our protestant missionaries are not far from Yunnan but Franchet says they cannot go there they would be killed!!! So that if you have a friend there ask him for seeds of Primula and Paeonies etc. etc."

Although Henry sent seeds to Bulley from Mengsi, the plants from this part of Yunnan were subtropical species and were unlikely to be hardy in England.

In 1901 Bulley and Henry met in England following Henry's resignation from the Chinese Customs Service. Bulley was still keen to get Chinese plants. In one undated letter to Henry he had stated that "there are few things in the wide world I should enjoy more than sending out a collector. But at present [about 1897] it's impossible. I wont

sell plants and I cant afford the expense without selling. Given prosperity I'll go myself some day." His nursery business did prosper, but Bulley never visited China. Instead he employed his own collectors or assisted in financing plant-collecting expeditions. In 1904 George Forrest (1873–1932) went to China for the first time, as Bulley's collector. He returned in 1910, sponsored by another English gardener, J. C. Williams (1861-1939), and Arthur Bulley. In 1911, financed by Bulley, Frank Kingdon Ward (1885-1958) made his first plant-collecting trip; it was not remarkably productive and probably displeased Bulley. Although Ward made several other expeditions, Bulley did not commission them. In 1913 Bulley engaged Roland Cooper (1890-1962) to collect in Sikkim, but their contract was soon terminated. Like Forrest and Ward, Cooper made other collecting trips in the Far East, but none under Bulley's sponsorship.

## Henry and Ernest Wilson

Early in 1898 Augustine Henry was transferred from Mengsi to Simao. The journey took 18 days by foot and mule. This customs post was the last new one to which Henry was assigned, and it was at Simao that one of the most significant events took place in his work of stimulating exploration of the Chinese flora. That event was the arrival of Ernest Wilson (1876-1930) in Simao with these instructions from the Veitch nursery:

The object of the journey is to collect a quantity of seeds of a plant the name of which is known to us. This is the object — do not dissipate time, energy or money on anything else. In furtherance of this you will first endeavor to visit Dr. Augustine Henry and obtain precise data as to the

habitat of this particular plant and information on the flora of central China in general.

These cryptic orders were the longawaited result of Augustine Henry's efforts to have the seed of the beautiful dove tree (Davidia involucrata) collected and transported to England for cultivation.

Those efforts began in 1888, when Henry set out with his Chinese coolies and Antwerp Pratt on a collecting trip that lasted three months and covered the area southwest of Yichang. On May 17 near the village of Mahuanggou Henry rode up a river valley and saw "one of the strangest sights he saw in China . . . a solitary tree of Davidia in full blow . . . waving its innumerable ghost handkerchiefs." At the time he did not know the tree's name, so he collected herbarium specimens. In the following autumn he managed to send two of his trusted coolies to the tree, and they collected fruits, which he sent with the herbarium specimens to Kew. The fruits and dried specimens reached London in 1889 and were examined by Daniel Oliver. Oliver prepared drawings of the fruits, which were the first seen by Western scientists, but he omitted to have any seed sown. In April 1891 Oliver published a description and illustration of the fruits and commented that "Davidia is a tree almost deserving a special mission to Western China with a view to its introduction to European gardens." That remark is so similar to comments made years later by Henry that it is hard not to conclude that he had suggested this to Oliver when he visited Kew during his home leave in 1890.

However, for a few years Davidia was forgotten. Then, in April 1897, William Thistleton-Dyer wrote to Augustine Henry

at Mengsi asking for seeds. Henry sent this reply on June 3, 1897:

With respect to seeds, I will do what I can, especially later on when I shall have less plant collecting to do in our immediate neighbourhood. But it really is a difficult matter collecting seeds — one arrives on the ground too early or too late. I tried e.g. to collect seeds of Gentiana serra and rhodantha common plants and failed to get a single seed. You may ask why not employ a native. Ah! you don't know the Yunnanese - my muleteer who collects plants is the only man I know who could or would do the work - and even he does only about [one-tenth] of what I could do if I had his time. The other Chinese and aborigines are too lazy for seed collecting . . . . The fact is that if one has nothing else to do, one might organize plans and people for carrying out such work, but it is difficult for me as I have a good deal to do. And yet I doubt if many of my specimens will be collected again for 50 years: as I have put an amount of energy into parts of the botanizing. The ? flowers of a certain Zanthoxyllum have cost me 3 visits to one spot and an expenditure of 6 hours time. Money is not what is wanted, but time, oceans of time. Nothing astonishes people at home so much as the fact, a real fact, that in countries like China, you cannot do everything with money. Patience is more valuable.

Henry continued by discussing various other subjects, but before he posted the letter another one arrived from Thistleton-Dyer asking specially for seeds of a redbud tree (Cercis racemosa). Henry added to his letter:

I never saw the tree but in one spot on the Hupeh-Szechwan frontier. It is useless of me to write to Ichang as I know no one there now: but I think you ought to make a strong effort to get the Consul there to send one of the coolies who accompanied me on my trip to the locality, & procure not only seeds of the Cercis, but also of Davidia . . . . Why Davidia is worth any amount of money. I only saw one tree of it, but doubtless there are others in the district . . . I assure you that if I could do anything by writing myself to

the Ichang Consul, I would do it; I know the ways of people in outposts. You will draw them, if you make the offer exciting. Davidia is wonderful.

On May 21, before receiving this long reply, Thistleton-Dyer wrote to ask for more seeds, "the majority of them being from Ichang plants." On receiving this letter, Henry considered sending the list to Yichang himself, but he decided that there was little hope of anything resulting. On July 19, 1897, he wrote a long, detailed letter to William Thistleton-Dyer in which he set out the following ideas:

In regard to seed collecting it is not a question of money, but of finding some one with the time on hand and the requisite intelligence and energy, and this is very difficult to find indeed.

I would suggest, so great is the variety and beauty of the Chinese flora and so fit are the plants for European climate, that an effort ought to be made to send out a small expedition — the funds e.g. being provided by a syndicate of say, a horticulturist, a private gentleman or two, &c. I estimate £1000 would cover the expenses for 2 years: and what I would recommend is that a man be selected, who has just finished his botanical studies at Cambridge University. I mean don't send a collector but a gentleman, a student, and an enthusiast. Suppose e.g. you could alight on a man like Willis of Ceylon was, just as he had finished his botanical course some years ago. The locality I would suggest is the mountain range separating Szechwan from Shensi or thereabouts — the expedition starting from Ichang in April and covering two seasons.

In conclusion, I can see now that there were hundreds of interesting plants which I might have noticed earlier in my plant collecting, if I had had the experience or genius or the teaching. If you ever again come across a budding collector like what I was when we began correspondence some years ago, please insist on him being more than a mere collector: and perhaps you will help to develop a naturalist.

This letter marks the beginning of a new period in Augustine Henry's life in which he recognized the vast potential of the Chinese flora for European horticulture, yet acknowledged his own inadequacy. It is clear that these letters also provided William Thistleton-Dyer with much food for thought, and for several months Henry got no further correspondence from Kew. During this period he was transferred to Simao. In 1898 he received a "very extensive letter" from Thistleton-Dyer and in his reply on June 8, 1898, Henry remarked that "I hope you will try and get a young Cambridge or Oxford botanist to come to this part of the world, do some naturalist [sic] work, and collect seeds and live plants for cultivation." In none of Augustine Henry's subsequent letters to William Thistleton-Dyer was the matter discussed further.

Thistleton-Dyer proposed an expedition to Harry Veitch of Veitch's nurseries, the company that had previously sent Charles Maries to Yichang with so little success. Veitch asked Thistleton-Dyer to recommend someone and in April 1899 Ernest Wilson set off for China. He traveled through the United States, where he visited the Arnold Arboretum in Boston and met Professor Sargent. He reached Hong Kong and then traveled to Hanoi, eventually reaching Laokoi. There were civil disturbances in the Mengsi area just before Wilson arrived in southern China and he was forced to remain at Laokoi. Eventually, after a long delay, he departed for Simao. Henry knew that Wilson was on his way; on September 19, 1899, he wrote to Thistleton-Dyer saying that "Mr. Wilson after a long delay at Laokoi owing to the disturbance at Mengtse &c. is on his way here and has reached Talang: and

will arrive in Ssemao on Sunday next. I will give him all the help possible."

Ernest Wilson reached Simao as anticipated and for several weeks stayed with Henry. On October 9, in a letter to Evelyn Gleeson, Augustine Henry remarked that

I have . . . a guest of all the things in the world at Szemao, a Mr. Wilson, late a gardener at Kew, who has been sent out by Veitch's to collect plants or rather their seeds and bulbs in China. He has made his way here to consult with me on best way of procedure and concerning the interesting country around Ichang and he will stay here 2 or 3 weeks. He is a self-made man, knows botany thoroughly, is young and will get on.

On the same day Henry wrote to Kew, noting that Wilson had reached Simao safely. He offered the opinion that Wilson would "do, I think, as he seems very energetic, fond of his botany . . . . He is also even-tempered and level-headed, the main thing for traveling and working in China." Henry gave Wilson "on a half-page of a notebook . . . a sketch of a tract of country about the size of New York State" on which he marked the place where he had found the single tree of Davidia involucrata in 1888. He also provided Wilson with useful information and hints. In October Henry was instructed to return to Mengsi to resume charge of the customs station there, so he and Wilson journeyed from Simao. At Mengsi they parted, but they remained close friends for the rest of their lives. Henry was pleased and relieved. To Evelyn Gleeson he confided that he "would be glad if [Wilson] will continue to carry on the work in China which has been on my shoulders for some years. There is so much of interest and of novelty."

Ernest Wilson traveled to Yichang and then to the hamlet of Mahuanggou, where

he found that Henry's lone dove tree had been cut down. However, as Henry had predicted, Wilson found other trees in the area and collected seeds for his employers. These eventually reached England, germinated, and produced many of the Davidia trees seen in the British Isles today. Wilson's success must have given Augustine Henry pleasure, for although he had sent the first fruits to Europe, none of the seeds had been sown, and the glory of raising the first seedling passed to Maurice de Vilmorin in Paris.

## Henry and Charles Sargent

In 1892 Charles Sargent was visiting Japan, where he met James Herbert Veitch (1868-1907), nephew of Harry Veitch. On his return to Boston, Sargent suggested to Harry Veitch that his nephew go to China to collect seeds for the Arnold Arboretum and the family nursery. James's uncle declined to send him and Sargent abandoned the idea of a Chinese collecting expedition until he began to correspond with Augustine Henry.

Henry's first letter to Charles Sargent is dated May 31, 1894. Like Kew, the Arnold Arboretum wanted seeds, and Sargent had asked Henry to collect. Augustine Henry explained his position to Sargent in much the same way as he had earlier explained it to Thistleton-Dyer. But, like Thistleton-Dyer. Sargent was persistent, and Henry had to reiterate in a letter written in September 1897 that he found "seed collecting almost out of the question, as my time is so limited which I can spend in the forests."

Shortly after arriving in Simao, Henry remarked casually in an undated letter to Sargent that "Yunnan is a splendid ground for the anthropologist, ethnologist, zoologist,

geologist: and I should very much like to see a trained expedition set out to explore — we who are on the spot are too busy with our ordinary duties to go in seriously for any such studies." By autumn 1898 Sargent was also pestering Henry to send seeds from Yichang, and Henry's response on November 20 was the same as that to Thistleton-Dver:

There are American missionaries in Ichang and many other parts of China and you could get lists of them from the mission boards and appeal to them. A circular letter might attract one or two out of the hundreds. Perhaps you don't like the idea of begging in this way: but Mr Bulley of Liverpool (whom you know, I think) has been somewhat successful in this direction.

As Veitch and Wilson were negotiating about the quest for Davidia, Sargent wrote to Henry proposing an expedition to China with Henry as a member. He received the proposal early in May 1899 and replied that "as the matter requires a considerable amount of thinking about, I intend to write to you fully by our next courier." As he promised, Henry replied in detail on May 9, again exactly as he had to Thistleton-Dyer. "As I consider enthusiasm in botany the chief quality needed in the man selected, I reply to your question 'is there anyone I could recommend in China' in the negative. The man can be found in the U.S. or in England. Indeed it might be better to send 2 men." Clearly Sargent wanted Henry to be his envoy, for on the following day Henry wrote a confidential note to Sargent saying that he could not see any way of obtaining leave from the customs service to go on an expedition, and that, in any case, the troubled situation within China made such a request from him to his superiors inopportune.

## In the final paragraph Henry wrote:

It must not be forgotten that I am doing fairly good botanical work as I am situated, as my own private hobby. I have pondered over the matter a good deal: and much as I should like to go on such an expedition, I must consider that I do not see any way to accomplish such a wish. I am unavailable. My home leave is due at the end of 1900: and I am looking forward to spending 1901 and 1902 in Europe. I feel that by that time, i.e. end of 1900, I must have a change of climate and surroundings for the benefit of my health, both physical and mental. It may seem absurd: but it is very difficult to bear up with the isolation, friendlessness and monotony of a place such as this.

In another letter dated July 21, Henry repeated his remarks and told Sargent that he would require a considerable salary for such an expedition and thus his "terms would be prohibitive . . . I could scarcely be expected to resign from my position in the customs, unless I saw an opening equally good. I am less loath to refuse, because I know that remaining in the Customs I still do good service to botany."

However, even that did not diminish Sargent's hope of enlisting him, and their discussions continued. It lasted many more months, probably due to delays in the mail service, and was still continuing when Wilson arrived in Simao. On November 14, 1899, after Wilson had left and Henry had returned to Mengsi, Henry wrote to Sargent: "I thank you very much for the confidence you repose in me, and for the liberality of your offer, and feel flattered by the high esteem you have in my capacities. But I think it is best to decline definitely."

His long letter continued with remarks about sending out a young collector. Sargent thought the person should speak Chinese, but Henry said that this was not necessary,

remarking that he was "sure Mr. Wilson will do excellent work, in the way of collecting seeds, bulbs, etc. . . . he is really at little disadvantage on account of his ignorance of Chinese." Henry said that no interpreter was needed, that "an ordinary boy will do." In concluding his letter Henry provided Sargent with advice on choosing a collector, again commenting on Ernest Wilson's suitability.

What is wanted is a man with common-sense, tact and especially good temper - of course I pre-suppose he is enthusiastic in botany and eager to travel. You ought not to have the slightest difficulty in finding such a man. Of course, as in Mr. Wilson's case it would be a good thing if he could come and see me and learn a great many wrinkles in that way. If Mr. Wilson were not employed by Veitch's for seed collecting, I think he would do very well — as he gets on well with the Chinese and is very keen to do as much collecting as is possible. I trust you will succeed in finding such a man. In conclusion, I must again express to you my best thanks for the kindness and liberality of your offer: so much esteemed by me, as coming from you one of the most distinguished of living botanists.

This finally compelled Sargent to stop his pursuit of Augustine Henry, but it was not the last offer Henry was to decline. One year later Henry left China for the last time — he had lost "the zest of youth" and was "tired of China, mentally dead tired of it." However, he was to retain great interest in its plants for the rest of his life, and he continued to encourage others to explore the vast country.

# Henry and David Fairchild

Before Augustine Henry left China, he received a letter from David Fairchild (1869-1954), a botanist in the U.S. Department of Agriculture, who was in charge of the office

of Foreign Seed and Plant Introductions. Fairchild visited southern China in March 1900, and according to his own account wrote to Henry for advice on collecting. Augustine Henry sent Fairchild his book on economic plants. Fairchild thought the book was "splendid." At the end of his letter, Henry answered Fairchild's query as to how he could procure seeds and plants from the interior of China, by giving the following advice: "Don't waste money on postage send a man." David Fairchild acknowledged that "this word of wisdom made a deep impression on me and had a great influence on my policy when I returned to the United States. Largely because of this advice I inaugurated an exploration of that vast country."

In 1903 David Fairchild visited London and called on Augustine Henry, who was working on his Chinese collections at Kew. He proposed that Henry should return to China for the U.S. Department of Agriculture, but Henry declined. However, the two men discussed the economic potential of Chinese plants and Fairchild departed more determined than ever to send explorers to China. In May 1905, under Fairchild's direction, Frank Meyer (1875-1915) went there for the first time. Although he concentrated on plants of economic value, he did introduce some ornamental species into North American gardens. Later, David Fairchild sent Joseph Rock (1884-1962), who made his name by introducing rhododendrons and conifers.

Henry began to talk about the great horticultural potential of Chinese plants soon after he returned to Europe. At a dinner of the Horticultural Club on March 8, 1902, in London he was the guest of honor. Sir William Thistleton-Dyer proposed Dr. Henry's

health in "a capital speech which evoked considerable amusement by its quaint combination of dry official reserve and genial appreciation of Dr. Henry's labours." According to the Gardeners' Chronicle, Augustine Henry's speech was outstanding. He pointed out that vast areas of China remained to be explored and yet stated that he had been the wrong person to undertake the task. He remarked that his education had not prepared him for botanical work, "an extensive knowledge of ancient Greece . . . being of no aid to him whatever." He hoped that an expedition under the auspices of the Royal Horticultural Society could be fitted out for China, where it would find not only plants of great ornamental value but also "many sorts of vegetables unknown to use, many fruits, . . . also unintroduced, and even forage-grasses," which he considered worthy of introduction. He noted that the climate of much of China was such that its native plants should be hardy in the British Isles and he cited "numerous species there existing, Ribes, Rhododendrons, &c., which would excel anything yet introduced."

# Wilson, Sargent, and Henry

Ernest Wilson returned to England in April 1902 with his collection of seeds and bulbs. So successful was his expedition that in January 1903, Harry Veitch again sent him to China. From this expedition Wilson returned in March 1906. In mid-April Charles Sargent was in England and met Wilson, whom he surprised by inviting him to return to China, this time for the Arnold Arboretum. After some negotiations Ernest Wilson agreed, and he wrote to Sargent:

So you have captured me at last. Twelve months ago I would not have believed it possible for anyone to have persuaded me into revisiting China on any terms. Since it has come to pass be it said that there is no person or institution I would rather serve than yourself and the Arnold Arboretum — Kew alone excepted.

Augustine Henry was in the United States when he learnt of Wilson's "capture" by Sargent. In fact Henry had been looking for a suitable position for Wilson and had found a possibility in Canada. He wrote to Wilson in November from Washington: "I have just come here from Boston . . . I shall miss you: am sorry. I agree with Sargent that this expedition is to be a great one. Success to you!"

His letter continued with recommendations on the cameras and photographic plates that Wilson should take to China and also mentioned Schimper's Plant Geography, which Henry noted "will put you in way of describing floral regions and doing 'Plant Society' [i.e. ecology] work." He told Wilson that he should take his own chemicals for developing plates and do his own developing: "It saves time! and is necessary, else you will be carrying about spoiled and useless plates." Augustine Henry must have felt that the mantle of responsibility was now finally off his shoulders, and that a new generation of collectors and explorers was bound for China.

In later years Henry was still consulted by these collectors. For example, Reginald Farrer (1880-1920), an English horticulturist who sponsored his own expedition to western China in 1913, was working with William Purdom (1880-1921) in April 1914 at Sining-Fu in Gansu province near the border with Xizang (Tibet). From there he wrote to Henry saying that they hoped to return to

Beijing by way of the Yangtze valley. Farrer wanted to "see in situ and obtain . . . Gentiana venosa and Primula nutantiflora." He asked Henry for full notes on where these species could be found. Henry replied, and Farrer later wrote from "The Valley of Rocks and Wolves, Chinese Tibet" thanking him for his "most lucid and valuable directions." Arthur Bulley also continued to consult Henry; in 1926 he wanted to obtain a species of *Lithospermum*, which had been collected in Yunnan. However, Henry had never seen or collected the plant and could not help Bulley in his quest.

#### Conclusion

If [Augustine Henry] had done no more than make known the marvellous riches of China he would have achieved more than most men. . . . Happily so many plants bear his name that while trees and shrubs are cultivated his memory will remain in every garden and arboretum for long years to come.

- J. W. Besant, Gardeners' Chronicle

Augustine Henry found pleasure in botany, which he told Charles Sargent was his "private hobby." It helped him to bear the monotonous daily toil of an officer in the Chinese Maritime Customs Service. His plant-hunting trips allowed him to forget the loneliness of life far from his home and friends. He confided to Evelyn Gleeson on August 29, 1896, that "I positively enjoy myself in the wild luxury of beautiful air, in the beautiful loneliness of our mountains." In China he learned to appreciate the plants and above all the forests. "A forest is the finest thing in the world: it is the expression of nature in the highest form: it is so full of beauty and of variety," he said in another

letter to Evelyn Gleeson. On returning to England he decided to take up a career in forestry and went to study at the French School of Forestry at Nancy. However, he was soon invited by Henry J. Elwes (1846-1922) to work on a monograph on trees cultivated in Ireland and Great Britain. Henry left Nancy and set to work on the book; the first of its seven volumes appeared on November 14, 1906. Early in 1907 Augustine Henry was approached to become reader in forestry at the University of Cambridge. He accepted and remained there until January 1913, when he became the first professor of forestry in the Royal College of Science in Dublin. Henry did much to influence the future course of forestry in Ireland and also carried out taxonomic research. On St. Patrick's Day 1908 Henry married Alice Brunton, daughter of Sir Richard Brunton, a leading English physician. Henry died in Dublin on March 23, 1930.

The Western world is indebted to Augustine Henry for the many fine plants he brought to the notice of botanists and horticulturists here. While Arthur Grove was correct in saying that many of Henry's discoveries would remain as herbarium specimens, it is also true that Henry encouraged others to go to China to collect the seeds and bulbs that he was unable to obtain. It is a remarkable fact that most of the collectors working in China at the beginning of this century were sent by persons who had corresponded with or met Henry. Ernest Wilson never forgot the help he received from Augustine Henry and paid many tributes to the "scholarly Irishman" who guided him. Of Augustine Henry's own introduction, the eponymous Lilium henryi, Wilson wrote: "It is particularly fitting that such a notable addition to our gardens should bear the honoured name of a pioneer who has done so much to acquaint a sceptical world of the rich floral wealth of interior China." From the Chinese flora's treasure chest, he displayed the jewels and allowed others, with his help and encouragement, to bring the gems to us. Without Augustine Henry we would be the poorer.

E. Charles Nelson is taxonomist at the National Botanic Gardens, Dublin, Ireland.

This paper was read at a meeting held in University College, Dublin, in November 1980, marking the 50th anniversary of Augustine Henry's death; the meeting was held under the auspices of the Irish section of the Society for the Bibliography of Natural History, the Society of Irish Foresters, and the Forestry Graduates Group.

## Acknowledgements

My thanks are due to the librarians and archivists of the Royal Botanic Gardens, Kew; the Arnold Arboretum, Boston, Massachusetts; the National Library of Ireland, Dublin; and the Hunt Institute for Botanical Documentation, Pittsburgh, for their assistance with this article and especially for making available copies of Augustine Henry's letters.

#### References

- Bean, W. J. 1908. "Viburnum utile." Curtis's Botanical Magazine. t. 8174.
- Besant, J. W. 1931. "The Late Professor Henry, V. M. H." Gardeners' Chronicle (3rd ser.) 87: 274-275.
- Bretschneider, E. 1898. History of European Botanical Discoveries in China. 2 vols. Sampson Low,
- Coats, A. 1969. The Quest for Plants, a History of the Horticultural Explorers. Studio Vista, London.
- Fairchild, D. 1941. The World Was My Garden: Travels of a Plant Explorer. Scribner's. New York and London.
- 1921. "An Agricultural Explorer in China." Asia, January: 7.
- Gleeson Mss., National Library of Ireland, Dublin. Letters of Augustine Henry and Evelyn Gleeson.
- Grove, A. 1930. "Professor Augustine Henry." Gardeners' Chronicle (3rd ser.) 2257: 248-249.

- Henry, A. 1896. "A List of Plants from Formosa with some Preliminary Remarks on the Geography, Nature of the Flora and Economic Botany of the Island." Transactions of the Asiatic Society of Japan, 24: supplement.
- -. 1893. Notes on the Economic Botany of China. Presbyterian Mission Press, Shanghai.
- Henry Mss., National Botanic Gardens, Dublin. Augustine Henry's diaries and letters.
- The Horticultural Club. 1902. Gardeners' Chronicle (3rd ser.) 31: 244.
- Kew Mss., Royal Botanic Gardens, Kew. (English Letters vol. 151, ff. 705-709, 710-714, 715-717, 718, 725-730, 752, 753.) Letters to W. Thistleton-Dyer.
- Morley, B. 1980. "Augustine Henry." The Garden (London) 105 (7): 285-289.
- -. 1979. "Augustine Henry: His Botanical Activities in China, 1882-1890." Glasra 3: 21-81.
- Morse Mss., Royal Botanic Gardens, Kew. Letters of Augustine Henry and Hosea Morse.
- Nelson, E. C. 1980. "An Irish Mandarin, Augustine Henry (1857–1930)." Taisce Journal 4(2): 12–14.
- Oliver, D. 1891. "Davidia involucrata." Hooker's Icones Plantarum, t. 1961.
- Patton, E. R. Unpublished ms. "Ulsterman and Chinese Scholar, Explorer, Photographer, Botanist: Thomas Watters 1840-1901."
- Pim, S. 1966. The Wood and the Trees, a Biography of Augustine Henry. Macdonald, London. The best source of biographical information on Augustine Henry.
- Sargent Mss., Arnold Arboretum, Boston, Massachu-
- Sutton, S. B. 1970. Charles Sprague Sargent and the Arnold Arboretum. Harvard University Press, Cambridge.
- Veitch, J. H. 1906. Hortus Veitchii. James Veitch. Lon-
- Wilson Mss., Arnold Arboretum, Boston, Massachu-
- Wilson, E. H. 1925. The Lilies of Eastern Asia. Stratford,
- Wilson, E. H. 1926. Aristocrats of the Garden. Stratford,



Nelson, E. Charles. 1983. "Augustine Henry and the Exploration of the Chinese Flora." *Arnoldia* 43(1), 21–38.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/217357">https://www.biodiversitylibrary.org/item/217357</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/250687">https://www.biodiversitylibrary.org/partpdf/250687</a>

#### **Holding Institution**

Harvard University Botany Libraries

### Sponsored by

**BHL-SIL-FEDLINK** 

#### **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Arnold Arboretum of Harvard University

License: http://creativecommons.org/licenses/by-nc-sa/4.0/

Rights: <a href="https://biodiversitylibrary.org/permissions">https://biodiversitylibrary.org/permissions</a>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.