

WIRED

THE RUCKSACK OF JOSEPH DALTON HOOKER | MICHAEL S. REIDY

7 November 1849, on the Sikkim-Tibet Border

“HOOKER, HOOKER, THE SAVAGES are killing me!” Archibald Campbell’s words barely reached his ears when eight men muscled Joseph D. Hooker into a tent. As the son of the Royal Botanic Gardens director, Hooker was far too influential to harm. His climbing partner had no such connections. Campbell lay curled on the ground, screaming, while the Sikkimese guards beat him with sticks.

The *Bombay Times* described the arrest as “wanton and unprovoked, as it was cowardly and cruel.” That statement was not entirely accurate. Both men had just returned from an illegal journey into Tibet. Campbell was a British agent. Hooker appeared suspiciously out of place: a tall, thin Englishman with a bandana around his forehead and a weathered beard dangling below his chest. On his back, he carried a case filled with peculiar brass instruments. Several notebooks hung from his side, their pages overflowing with meticulously mounted and labeled plants.

The Sikkimese demanded to know what they had been doing in Tibet.

It was a good question.

According to official documents, Hooker had traveled to India as a mere botanist, the leader of the first British state-sponsored expedition to Kanchenjunga, then thought to be the tallest mountain in the world. Back in England, Hooker’s friend, Charles Darwin, was wrestling with his theory of evolution. At the time, Darwin was vexed by the distribution of species across geographic barriers, such as high mountains. Creationists argued that God had placed similar plants on the top of every individual peak. If Hooker could find slight changes to the vegetation as he traveled up and down the Himalaya, he might be able to help Darwin demonstrate that the species themselves had migrated, adapting to each new environment.

In his own journals, however, Hooker described a more private dream. He felt drawn

[Image] **Walter Fitch’s watercolor of Kanchenjunga, after a sketch by Joseph D. Hooker.** Courtesy of the Director and the Board of Trustees, Royal Botanic Gardens, Kew



by the sheer vertical expanse of the region, and he yearned to climb “into the snows.” Hooker’s unauthorized plan was to explore the Nepalese passes along the sides of Kanchenjunga, to scale the mountain’s flanks as high as possible and perhaps to steal across them into the forbidden land of Tibet. By then, China had long laid claim to that territory, closing it off to foreigners and insisting that other bordering nations refuse access as well. There, Hooker dreamed, he could find immense heights “untraveled” and unique plants “never described” by any European.

The Sikkimese guards did not know Hooker’s secret aspirations—nor did they find the sketchbooks that he carried inside his rucksack. Lay hidden were the detailed drawings of the topography of Sikkim, the obvious work of a trained cartographer: sinuous blue lines for rivers, thick dots for trails, gentle shading for steep cliffs and black ink for peaks with perpetual snow. With a pencil tied to his waist for quick access, Hooker had added incrementally to his journal entries and sketches as he traveled, until they became a faithful cartography of his personal adventures.

Yet maps often hide more than they reveal. In those days, India served as Britain’s premier imperial outpost, the “Jewel in the Crown.” Incorporating the country’s frontiers under British rule required painstaking geographic surveys, part of a larger project to envisage—and eventually control—the interior of South Asia. The British Great Trigonometric Survey had begun this process in the early-nineteenth century, under the supervision of George Everest, but the harsh climate and challenging terrain hampered its completion in the mountains.

No Westerner had yet explored the central and eastern portions of the Himalaya, “while all to the north,” Hooker mused, “was involved in a mystery.” The “golden age” of European alpinism was still a few years away. Climbers were just beginning to transform the Swiss Alps into what Leslie Stephen soon called the “playground of Europe.” Hooker realized that this developing sport might offer the skills he needed to unravel the “mystery” of the less-accessible mountainous regions. After he arrived in Darjeeling, India, he made several short treks into the hills, testing his mettle with the nailed leather boots of the day and a small tent made of two blankets sewn together. What he lacked in training and equipment, he would make up for with resolve.

October 1848 – January 1849, Eastern Nepal

IN OCTOBER 1848, accompanied by sixty porters, guides and guards, Hooker began his first attempt to reach the snows of Kanchenjunga. Unable to gain permission to enter Sikkim, he led his party west through the Nepalese frontier, then north following the Tambur River toward the Wallanchoon and Kambachen passes.

Each day, Hooker noted the changes in vegetation. As he gained altitude, he crossed from tropical to temperate to alpine zones. Earlier naturalists had to spend many months on board crowded vessels, moving through numerous degrees of latitude from the equator toward the poles, to observe these kinds of transitions. Hooker could transform the Himalaya into a similar laboratory in a single



[Image] *J.D. Hooker in the Himalayas. A mezzotint by W. Walker after a picture by Frank Stone.* RBG, Kew

day of upward travel.

Each evening, he set out his barometers, thermometers, sextants and compass to update his sketches. As he wrote in his journals, he prided himself on being “the first Englishman” to see these lands. A dense mist shrouded the loftiest heights, and he didn’t attain a glimpse of Kanchenjunga until his party reached the summit of Tonglo (aka Tanglu, 10,080’) that November. From there, the great mountain appeared as a dazzling mass of snowy peaks embedded with blue glaciers that gleamed “like aquamarines set in frosted silver.”

The expedition now followed his line of sight for six days toward the Wallanchoon Pass, cutting a path through deep snow for more than four miles near the crest. With his guide, Hooker attained the ridge late in the day

and then turned back. He didn’t mention in his published journals why he would give up so close to the Tibetan frontier. Privately, he admitted to a friend that he “had no strength to crawl farther.” Overtaken by darkness, Hooker and the guide spent a harrowing night without provisions or shelter at 13,500 feet.

The next morning, Hooker sent most of his party back to Darjeeling, retaining eighteen porters and a guide to set off southeast toward the Kambachen Pass for an attempt on Nango Mountain. They traveled up ladders lashed to precipices and across makeshift cane bridges, erected by yak herders for use in the summer months. At 15,000 feet, they encountered snowdrifts interspersed with moraines of enormous boulders.

Camped below an amphitheater of white peaks, they awoke to thick fog, fresh snow and bitter temperatures. “We dragged ourselves along, grasping every prominence of the rock with our numbed fingers,” Hooker recounted. It was still the era before ice screws, crampons or sophisticated rope techniques, and at a broad shelf of snow around 17,000 feet, “with slippery footing, where I was stumbling... every few steps, and icy-cold wet feet, hands and eyelids,” he was forced to abandon the climb, 2,000 feet below the summit.

To the north appeared Choonjerma Pass: a chaos of blue glacial ice and deep snow studded with splintered rocks and steep crags. It took them four days to reach the crest. “Remarkably long and hard,” Hooker scribbled, reeling from the altitude and the final eight-mile slog.

With a severe headache and shortened breath, he set off alone to collect lichen. More than 3,000 feet below him, a sea of clouds floated, interrupted by the spurs of the range he’d crossed. Here, the snows of December would halt them. Kanchenjunga lay fifteen miles away; his chance to enter Tibet seemed farther still. Yet he took solace from the experience: “Any combination of science and art can no more recall the scene, than it can the feeling of awe that crept over me, during the hour I spent in solitude amongst these stupendous mountains.”

Like all mountaineers, Hooker longed for such remote and adverse regions. Not a single Western map referenced the name of any place that he had just visited. “That I was poking in and out over the western base of Kinchin,” he wrote his father, “is all I can affirm.” He returned to Darjeeling, where he organized his plant specimens to send to England. He also

bought a three-week-old Tibetan mastiff puppy he named “Kinchin,” who became his companion as he planned his second and much-longer trek into “the loftier parts of Sikkim.”

May 1849 – November 1849, Western Nepal

IN MAY 1849, with forty-two guards and porters, Hooker set out once again. This time he followed the Teesta and the Thlonok rivers, toward Kanchenjunga’s eastern and northern shoulders. While the men built cane bridges across rain-swollen waters, Hooker collected plants with his dog. In his letters, he dramatized an ascent of a steep couloir above the banks of the Thlonok, flanked on all sides by “lofty precipices wholly inaccessible.” Perched precariously high on the side of a rock face, “spread-eagle fast against the cliff...with no handholds whatever,” he heard a hollow roar. He turned just in time to see an avalanche of stones cascade toward the abyss. A ricocheting rock shaved off Kinchin’s whiskers.

Finally, in mid-July, the expedition reached the glacier. Near the boundary between Sikkim and Tibet, deep snows and vertical cliffs stopped Hooker again. “So, here at last, after three months of obstacles,” he wrote to his father, “I stood at the back of the entire Himalaya range.” In a blinding wind, he spent two hours taking altitude measurements and sketching his position. “Distant snowy peaks, stupendous precipices, morained glaciers, transported boulders and rocks rounded by glacial action, formed the landscape which everywhere met the view.”

After resting and gathering stores in Choongtam, they headed up the Lachoong valley toward the Donkia Pass (aka “Dongkhal,” 18,000’), long abandoned by salt traders traveling between Sikkim and Tibet. The faint trail slowly disappeared, and at 17,500 feet, a steep crest rising between two precipitous peaks offered a “fatiguing ascent.” When his guide refused to go farther, Hooker continued alone. “I ascended over loose rocks to between 19,000 and 20,000 feet, and reached vast masses of blue ribboned ice, capping the ridges, but obtained no further prospect.” A huge vertical mass of ice forced his retreat, but not before he got his first glimpse of the “howling wilderness” of Tibet.

Encouraged by his success, he now retraced his steps to Choongtam to meet British agent Archibald Campbell. The two men planned to follow a similar route around the Donkia



[Image] **The British used Hooker’s map to invade Sikkim.** (See also Ray Desmond’s *Sir Joseph Dalton Hooker: Traveller and Plant Collector*.) Joseph Hooker Papers, RBG, Kew

Pass and over the frontier. Twelve marches led them into the snows. One by one, porters and guides abandoned them, and with an “indomitable share of resolution and boldness,” they finally slipped into Tibet.

Hooker spent four days there with Campbell, fulfilling his lifelong dream. He was the first European to measure the height of the Tibetan Plateau, a question of great interest to cartographers back home. And he was the first to configure accurately the topography of the surrounding Himalayan peaks. Echoing the Romantic sensibilities of the time, he rhapsodized over the wild, lonely views: “Never in the course of all my wanderings, had my eye rested on a scene so dreary.”

SHORT ON SUPPLIES, the Brits made their way back across the border to Tumlong, Sikkim, then struck east toward the Chola Pass (aka “Cho La Pass,” 17,780’), where Hooker’s wanderings abruptly ended. The Sikkimese authorities held the Brits captive for almost two months. They transported them both back to Tumlong while rumors flew to London: *Will they be hanged? Is there to be war?* Hooker wrote to his mother, assuring her that the reports were exaggerated. They weren’t going to be hanged, and though war with Sikkim seemed probable, Hooker wasn’t concerned. “They have no muskets; their bows they handle very awkwardly; their long knives will be useless against artillery.”

The British government sent two regiments to force their release. Hooker’s private sketchbook now included a survey of the

major valleys and mountain passes of Sikkim, exactly what an army would need to invade. “I had just finished for you an excellent large map of my wanderings,” he wrote to Darwin, “but have thought it proper to give it to General Young, who was all abroad as to how to dispose of the troops now marching into Sikkim.” The soldiers used the secret map in their punitive campaign, which ended in 1850 with more than 600 square miles of territory annexed to British-controlled India.

Four years later, Hooker’s *Himalayan Journals* (1854) sold quickly in England. It is an exciting climbing narrative, full of harrowing ascents and poetic imagery, but perhaps most impressive is the suspenseful manner in which it conveys the feeling of entering uncharted terrain—the overwhelming expectation and pure potential attached to each step, as well as the intense loneliness and vulnerability. The greatest difficulty he encountered, Hooker admitted, was the impossibility of guessing his own position, altitude and even direction. He spent much of the time lost, both physically and emotionally. Creating a map, rather than using one, made it twice as hard for Hooker to find his bearings.

Armchair adventurers in England delighted in this sort of romance. They, too, wanted to be lost, if only vicariously, in a “howling wilderness”—even as the author strove to chart its mysteries. Although few readers recognized the ramifications of his botanic discoveries, Hooker dedicated the book to Darwin. And in 1859, Darwin’s *Origin of Species* included an entire chapter on the distribution of alpine plants, based largely on Hooker’s gathered material, which had provided Darwin with the proof he needed.

It is no coincidence that the mid-nineteenth century was a golden age of mountaineering and scientific exploration—and a time of imperial expansion. Each pursuit compelled a sense of dominion and aimed to make the unknown legible. Although the romance of the climb may be what inevitably captures our imaginations, alpinism is a sport deeply rooted in broader intellectual and political developments, both seemly and unseemly. An unmistakable power accompanies knowledge of the heights, where a bird’s-eye view can lord over trade routes, uncover watersheds and direct military operations. European empires operated through the establishment of order, and nothing ordered nature so well as a detailed map pulled effortlessly from a rucksack. ■