

ly brought into existence, albeit through duplicity and manipulation.

There was nothing free about the newly created Congo Free State, except all the material wealth that Leopold was “free” to steal. Initially, he stole as much ivory as he could, but that was nothing compared to rubber, which took off as an industry in the 1890’s. It was in collecting rubber sap from “the wood that weeps,” that the most brutal methods of slave-labor were employed.

All forms of coercion were used to force natives to join the slave-labor armies required to collect the rubber. Leopold’s private army, the Force Publique, was the “rule of law” in the Congo. The following is a report of the methods of the Force Publique written in 1899: Its method “was to arrive in canoes at a village, the inhabitants of which invariably bolted on their arrival; the soldiers were then landed, and commenced looting taking all the chickens, grain, etc., out of the houses; after this they attacked the natives until able to seize their women; these women were kept as hostages until the Chief of the district brought in the required number of kilogrammes of rubber.”

Hochschild reports that, “more than eleven million pounds of rubber a year” were being shipped out of the Congo by the turn of the century. This was accomplished by forced conscription of a large

number of laborers, who were treated like animals. The Anglo-Belgian India Rubber and Exploration Company (A.B.I.R.), “responsible for only a small fraction of the Congo’s rubber production, listed 47,000 rubber gatherers.”

Off with Their Hands!

Only the most brutal methods of repression could succeed in enforcing such slave-labor policies on an entire population. One was the use of the *chicotte*, “a whip of raw, sun-dried hippopotamus hide, cut into a long sharp-edged corkscrew strip,” which was applied across the bare buttocks of men, women, and children, from 25 to 100 strokes, often resulting in death. Usually it was applied by one Congolese against another.

Sometimes entire villages were exterminated by the army or companies, since they were interchangeable, to break the resistance of another village nearby. The soldiers needed to prove they had used each rifle cartridge to kill a native, so they would cut off the right hand of each corpse. The hands were then smoked, to preserve them for counting at a latter date. Sometimes, hands were cut off living people, either to make “count,” or to terrorize the population. One district commissioner recalled that, when it came to gathering rubber, “one must cut off hands, noses, and ears.”

Partial Truth

In Part II, Hochschild tells the story of how Edmund Dene Morel, a British journalist, and Roger Casement, an employee of the British Foreign Office, waged an international propaganda war against Leopold’s brutal rape of the Congo.

Much of what Morel and Casement wrote about Leopold was true. However, anyone knowledgeable about African history, will ask certain questions, when he reads that Morel exonerated British imperialism in Africa, and Nigeria in particular. More suspicions are raised, when it is revealed that Morel received financial, and political support from the British establishment itself, along with the “deep admiration” of racist Bertrand Russell. This ought to have provoked Hochschild to ask: Were the attacks by Morel and Casement against Leopold, a British operation, using a legitimate cause to eliminate an imperialist rival, and divert attention from their own nasty operations?

Hochschild’s refusal to at least raise such a hypothesis is disturbing, because it is how the British routinely escape scrutiny for their own evil imperialist practices in Africa.

—Lawrence K. Freeman

Lawrence Freeman is an Africa correspondent for Executive Intelligence Review.

The Great Project of the 15th Century

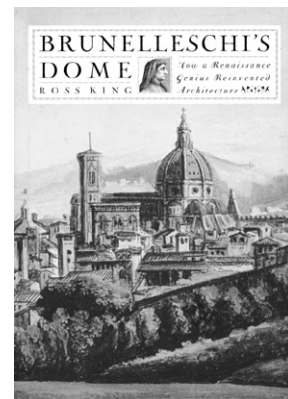
“What man, however hard of heart or jealous, would not praise Pippo the architect when he sees here such an enormous construction towering above the heavens, vast enough to cover the entire Tuscan population with its shadow, and done without the aid of beams or elaborate wooden supports?”

—Leon Battista Alberti

Most Americans today are unaware that the founding of this nation is, in significant part, the outcome of a “great project” of the early Fifteenth century in Florence: the design and construction of what is, even now, the largest (and, arguably, the most beauti-

ful) dome ever built. Now, with the release of this new book, Americans, who are the beneficiaries of the revolutionary events which took place in Florence, Italy, during the first half of the Quattrocento (1400’s), can become familiar with this spellbinding tale.

Indeed, the dome of Santa Maria del Fiore, the Cathedral of Florence, which still today towers over the city, has, appropriately, come to symbolize the Renaissance itself. Although the project involved the entire Commune of Florence, its workforce, its artisan class, and its population, who followed every development—in the same way that the American population followed the space



**Brunelleschi’s Dome:
How a Renaissance Genius
Reinvented Architecture**
by Ross King
New York, Walker & Company,
2000
192 pages, hardcover, \$24.00

program in its heyday—it was, above all, the genius and determination of one man, Filippo Brunelleschi, who himself epitomizes the idea of the “Renaissance Man,” which made it happen.

Author Ross King, basing himself on original sources, including the first biography of Brunelleschi by Antonio Manetti, written in the 1480’s, has pulled together, in a compelling narrative that races along like a tightly written spy-thriller, many threads of the story—which, to my knowledge, have not appeared together in one place before, in an English-language publication—and woven them into a wonderful tapestry.

Mechanical Ability

Filippo was born in 1377, in the shadow of the half-built Cathedral. His father, the notary Ser Brunellesco, had voted in the referendum of 1367 that approved the design of the architect, Neri di Fioravanti, calling for a huge octagonal dome to crown the Cathedral. At that time, no one had the faintest idea how this would be accomplished. (Neri had left a model for his design, which later collapsed of its own weight, an ominous sign, which only added to the challenge!)

King reports that, from his earliest childhood, Filippo displayed an uncanny ability for solving mechanical problems. As a child, he would have seen the new machines that had been invented to raise large blocks of marble and sandstone to the top of the Cathedral. His apprenticeship, at age 15, to a goldsmith, began to prepare him for his life’s work: he began studying the science of motion, especially weights, wheels, and gears, knowledge that would stand him in good stead when he later undertook the daunting challenge of vaulting the enormous dome (143.5 feet in diameter) of Santa Maria del Fiore.

In 1401, Brunelleschi lost a competition to Lorenzo Ghiberti for the coveted commission to decorate the bronze doors of the Baptistry, directly opposite the Cathedral. This defeat became one of those serendipitous historical ironies, because it freed Brunelleschi to devote himself to the study of architecture. He left, almost immediately, for Rome, with

his friend, the sculptor Donatello, where he would stay for most of the next 15-16 years, studying the Roman ruins, including the Pantheon, with its huge dome. (The Pantheon, built by the Emperor Hadrian, at 142 feet across, and 143 feet high, had stood for 1,300 years as the world’s largest dome. With no visible means of support, it was called the “house of devils” by the Fifteenth-century Romans, who had no knowledge of the laws of tension and compression.)

By the time Filippo, now 40 years old, returned to Florence, in about 1416 or 1417, the tambour, or drum of the Cathedral, would have been completed, with 14-foot-thick walls to support the weight of the cupola. By then, Brunelleschi had already established his reputation as the inventor of linear perspective, through a famous experiment, which is aptly described and illustrated by King.

Capomaestro

The competition for the job of *capomaestro* (foreman) of the construction of the Dome is presented by King, in all its drama. Brunelleschi stunned the Opera del Duomo by proposing to build the huge vault, *without the aid of centering*. Perhaps not completely trusting Filippo’s revolutionary idea, the commission was divided between him and Ghiberti, a situation which rankled Filippo for years, until he managed to assume complete control over the project.

One of Brunelleschi’s leading disciples, the renowned architect Leon Battista Alberti, in 1441, just five years after the Dome had been completed, wrote a dialogue called, “*Della tranquillità dell’animo*” (“On the tranquility of the soul”). A character much like Filippo muses: “I am accustomed, most of all at night, when the agitation of my soul fills me with cares, and I seek relief from these bitter worries and sad thoughts, to think about and construct in my mind some unheard-of machine to move and carry weights, making it possible to create great and wonderful things.”

In fact, like Alberti’s imaginary inventor, Filippo had, repeatedly, to invent “unheard-of machines.” As King

tells us, “The hoist he created was to become one of the most celebrated machines of the Renaissance, a device that would be studied and sketched by numerous other architects and engineers, including Leonardo da Vinci.” One of Filippo’s machines, the *castello*, was later sketched by the young Leonardo, then working as an apprentice to the sculptor Andrea del Verrocchio.

Astronomical Observatory

The relationship between Paolo Toscanelli, “one of the greatest mathematicians and astronomers of the century,” and Filippo, who met in 1425, is also presented by King. Toscanelli, who described his friendship with Brunelleschi as the greatest association of his life, drew the map used by the Genoese sailor Christopher Columbus on his voyage in 1492. King tells us how, in 1475, “Toscanelli climbed to the top of the dome, and . . . placed a bronze plate at the base of the lantern. This was designed so that the rays of the sun would pass through an aperture in its center and fall some 300 feet to a special gauge on the floor of the cathedral, a stone inlaid in the Chapel of the Cross. Santa Maria del Fiore was thus transformed into a giant sundial!”

This instrument gave Toscanelli the ability to calculate, with far greater precision than previously, the exact moment of both the summer solstice and the vernal equinox. Toscanelli’s observations permitted him to refine the astronomical tables used by sailors and mapmakers, and to calculate the positions of the sun and the Pole Star throughout the year. Thus, Brunelleschi’s Dome played a significant part in the discovery of the New World.

I would urge anyone interested in learning about the “great project” of Fifteenth-century Florence to read this little book. If we, today, can revive the kind of joy at solving impossible problems, that Brunelleschi and his contemporaries brought to the building of the great Dome in Florence, civilization may yet find a way out of the terrible crisis that now confronts us.

—Bonnie James