

# AN ACT OF FAITH & THE RESTORER'S ART

**Just Two Years After A Devastating Earthquake, The Basilica Of St. Francis In Assisi Reopens Its Doors**

SERGIO FUSETTI WAS STANDING AT THE ALTAR WHEN HE HEARD A SOUND LIKE DISTANT thunder rumble through his precious church, the Basilica of St. Francis in Assisi. Instinctively, he looked up. He saw cracks appearing in the figure of Saint Matthew 65 feet above him. Out of the corner of an eye, Fusetti spied more cracks fissuring along the frescoed walls and ceiling of the church he had been restoring steadily for the past 26 years. Everything was undulating crazily. He shuddered as the entire basilica heaved up. Only then did he make a dash for the door. He was just a few strides from the altar when the heavens-or rather, the 13th-century fresco of a starry sky and the brick vault it was painted on--crashed around him. Weeks later, he would still bear bruises shaped like bricks on his shoulders and chest.

*Restorer Sergio Fusetti "bandages" a 13th-century fresco of Christ and the angels by Roman master Jacopo Torriti on a damaged vault of the Upper Church. Fusetti is applying an overlay of rice paper and acrylic resin to bind the paint to the plaster.*



On top of the collapsed fresco and vault, a hard rain of rubble-broken roof tiles, wood beams and stones--enveloped him. Clawing away with one arm, Fusetti managed to extricate himself and stumble out a door into the dazzling September sunshine.



*Frames from a videotape shot during the September 1997 earthquake that shook the Basilica of St. Francis in Assisi capture the dramatic collapse of a section of vault and its priceless 13th-century frescoes inside the entrance to the Upper Church.*

"When I got out, I thought at first that the whole church had collapsed," the restorer recalls as he polishes off a glass of red wine. Before the earthquake, the 47-year-old Fusetti never drank and rarely smoked. These days, he's a born-again fatalist, giving in to a little wine at meals and as many cigarettes as he likes.

We are seated in a restaurant overlooking the very-much-intact pink-and-white basilica, crowning glory of this walled medieval hill town in Umbria 118 miles southeast of Florence. An artistic and religious pilgrimage site comparable in importance to St. Peter's in Rome, Assisi draws millions of visitors who flock here to marvel at the unparalleled ensemble of seminal frescoes and pay homage at the crypt containing the bones of the town's most famous son.

Liberalily endowed by the papacy since its creation and still under the control of the Vatican, the basilica is actually two churches built together, one on top of the other, with the entrance to the Romanesque Lower Church tucked beneath a buttress to the south side of the largely Gothic Upper Church. For months following the earthquake, much of the Upper Church was sheathed in scaffolding; now only a portion of the southern side is trussed up.

"I was lucky that the earthquake was short--12 seconds," Fusetti continues. "Another 7 seconds and I wouldn't be here talking to you."

Others were not so lucky. Four people--two structural experts and two friars--were killed in the earthquake that struck the basilica at 11:42 A.M. on September 26, 1997. Like Fusetti, they were inspecting the damage from an earlier tremor when the main earthquake, measuring nearly 6.0 on the Richter scale, slammed into the 750-year-old basilica. They were buffed beneath two tons of frescoes, brick vaulting, supporting ribs, plaster and rubble, which fell with such force that it smashed portions of the stone floor.

By the time the dust had settled, some 2,300 square feet of frescoes, including transcendent works attributed to the Florentine artists Giotto and Cimabue, had collapsed, shattering into tens of thousands of fragments. According to *Time* magazine art critic Robert Hughes, it was the "worst catastrophe to afflict the fragile patrimony of Italian art history since the 1966 flood in Florence." The basilica--filled literally top to bottom with masterpieces and unquestionably one of the pivotal artistic, architectural and spiritual achievements of mankind--suffered grave but not, as it turned out, irreparable damage.

*The restoration of the basilica nears completion. The facade of the Upper Church is at right.*

"Irreparable" is not a word Fusetti, who oversees the basilica's overall structural and artistic restoration, and Paola Passalacqua, the restorer coordinating the effort to piece together the Giotto and Cimabue frescoes, recognize.



This month, after a painstaking restoration undertaken by a team of architects, engineers, art historians, conservators and church officials, along with a small battalion of 100 paid workers and 500 volunteers, the Upper Church of the basilica, closed since the earthquake, is scheduled to reopen. Pope John Paul II has been invited to address the ceremonies. Accomplished in record time by Italian standards, the reconstruction has been a race to beat the deadline of Jubilee year 2000, when Assisi expects the arrival of 12 million visitors--triple the normal number.

The paintings will look even more brilliant than before," promises Fusetti. He should know; he and his team of private restorers completed a full-scale restoration of the Upper Church only 14 years ago.

In the 1997 quake, the entire ceiling of the Upper Church was riven with cracks, some wide enough to put a fist through. Four sections collapsed completely, leaving two gaping holes. The opening near the entrance spanned 1,000 square feet and combined two sections attributed to Giotto and his assistants--a large fresco of Saint Jerome and smaller frescoes of other saints. Above the altar, two sections containing a large fresco of Saint Matthew by Cimabue and parts of a starry sky covered nearly 1,300 square feet. Apart from the bricks with frescoes still intact, the largest fragments from these collapsed sections fit in the palm of a hand, while the smallest are no bigger than a bread crumb.

If not all the frescoes are in place by January 2000 (and Passalacqua estimates it will take at least another two years before some of them are ready), it will not be for lack of trying. In addition to the immensely patient team of restorers manually

piecing fragments together, Passalacqua is placing her faith in an experimental computer program designed by researchers at Rome's La Sapienza University to help reassemble the shattered frescoes. She anticipates that at least two of the eight collapsed saints attributed to Giotto and his assistants will be back in place on the archivolt, a decorated arch inside the entrance, by Christmas.

If there is a single monument that encapsulates the origins of Italian art, it is the Basilica of St. Francis in Assisi. According to the Italian art historian Elvio Lunghi, a local authority who has written extensively about the church and its art, the basilica marks the transition from the static, medieval style of painting to the more realistic, animated manner that ultimately flowered into the Renaissance.

Though Cimabue's roots lay deep in the Byzantine tradition, with its otherworldly images frozen in a spiritual realm of eternal symbols, he imbued those stylized forms with emotive content and a heightened sense of drama. His student Giotto brought art further down to earth. The frescoes of the life of Saint Francis attributed to Giotto unfold like a period drama, with recognizable characters playing out highly charged scenes against a backdrop of familiar landmarks. What Giotto did to revolutionize art, Saint Francis did to scourge the hidebound medieval Church.

With its low, rounded ceilings, the somber Lower Church contains the work of both these Florentine masters as well as radiant frescoes by the later 14th-century Sienese painters Simone Martini and Pietro Lorenzetti. Here, too, are some of the basilica's earliest frescoes, innovative works by the artist known as the St. Francis Master. The Lower Church emerged relatively unscathed from the 1997 earthquake, and frescoes that had been shaken loose from the masonry have now been reattached.

The Upper Church, with its pale stone facade opening onto a broad green lawn, has stained-glass windows illuminating a soaring, light-filled interior, its walls and ceiling awash in the cinematic "greatest hits" of early Italian art. The most famous of these are the 28-fresco cycle of the life of Saint Francis and a pair of supernally haunting Crucifixions by Cimabue, rendered ghostly by the oxidation of lead white paint. Faces, bodies and clothing have been transformed into a shadowy dark brown like a photographic negative.



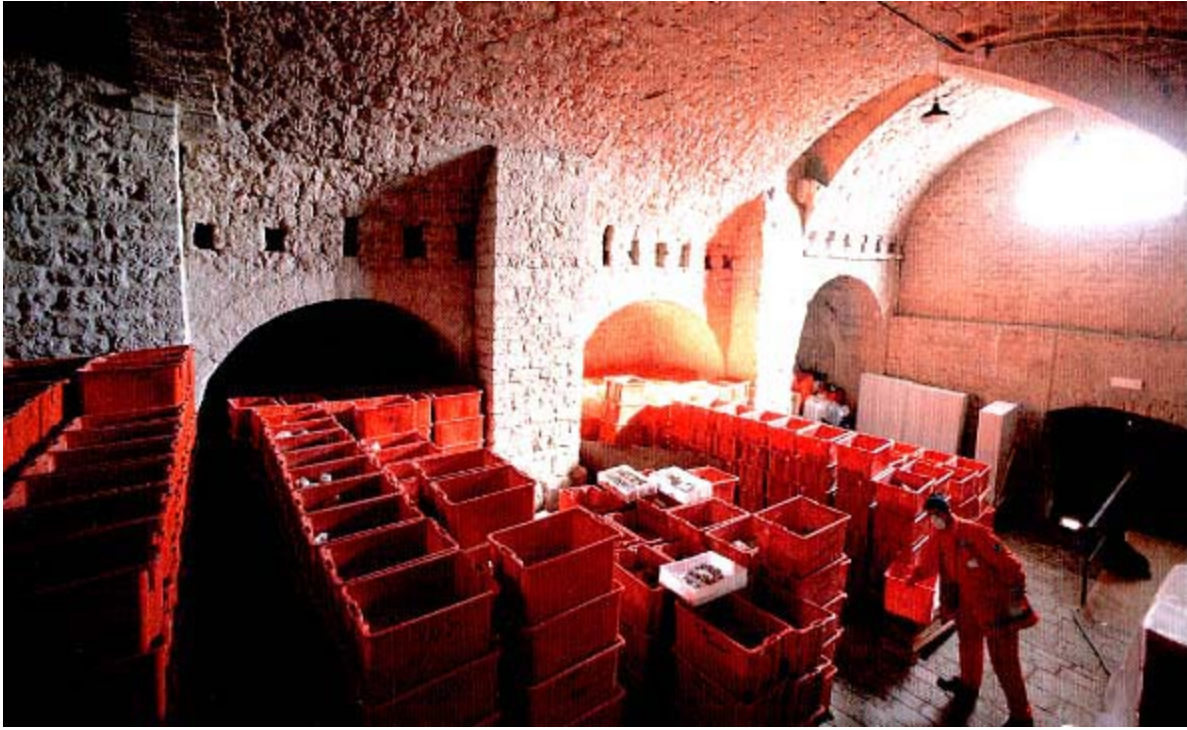
*Following the quake, volunteers and students sift through the rubble from the collapsed vault above the main altar, searching for fragments with smooth, painted surfaces--pieces in the vast jigsaw puzzle of shattered frescoes.*

Dante, discoursing on the fleeting nature of temporal glory, evoked these rival artists in 2he Divine Comedy in 1310: "In painting Cimabue thought he held / the field, and now it's Giotto they acclaim-- / the former only keeps a shadowed fame."

"The basilica is the jewel of all Italian churches in terms of art," says Alan Feltus, an American figurative painter living in the countryside near Assisi. It was the incomparable beauty of the basilica's art that convinced Feltus, his artist wife, Lani Irwin, and their two sons to move here from Washington, D.C. a dozen years ago.

During lunch under a vine-covered arbor, Feltus and his 20-year-old son, Tobias, describe what it was like to be among the hundreds of volunteers who streamed into Assisi to help save, sift and sort fragments from the collapsed frescoes. Even though it was tedious, heart-wrenching work, father and son spent a month at it, crouching over piles of rubble in an improvised staging area on the lawn in front of the Upper Church.

"It didn't matter how much could be retrieved or where the fragments would end up," Alan recalls. "If we could salvage any part, it was worth doing. It was a very emotional time because we were constantly being reminded of the loss of life and the loss of art as we held up little pieces of fresco that meant so much to us, trying to save every crumb."



*Salvaged fragments from the Cimabue vault, filling 1,023 plastic crates, were temporarily stored beneath the Sacred Convent.*

The basilica, of course, is not simply a museum. It is first and foremost a sacred memorial to the mild-tempered founder of the Franciscan order, a visionary miracle worker who became the much-revered patron saint of Italy. The frescoes are inseparable from the itinerant mystic who preached to the birds and called the sun his brother and the moon his sister—the man who espoused obedience, chastity and poverty and wanted to be left unburied, "laid out naked on the naked earth."

On a recent visit to Assisi, I was given a preview of the reconstructed basilica, from the subbasement stables to the vertiginous rooftops, still under construction. Clanging shut the metal door of the outdoor elevator cage, Sergio Fusetti tugs his beard and flashes an amiably diabolical grin as if he has a sixth sense about people like me who have a fear of heights. As we slide up the side of the left transept, high above the cubist jumble of red tile roofs, the Umbrian plain emerges hundreds of feet below, an elongated patchwork of green fields planted in grain, olive groves and sunflowers.

A bearish character with the build of a heavyweight boxer and fierce brown eyes, Fusetti is hardly the picture I imagined of the art restorer as scholarly aesthete. A former sculpture student, he is a self-taught restorer who has worked on reviving fading artistic treasures all over Italy.

The elevator deposits us in front of the tympanum, the once-crumbling triangular apex of the transept that nearly crashed through the roof. In a daring rescue operation, two cranes hoisted a 4.7-ton metal truss 120 feet into the air and gently sheathed it over the tympanum, just minutes before a powerful aftershock rocked the basilica. Now that truss is gone and the disintegrating stones have been replaced with freshly hewn ones, striated in pink and white to look as timeworn and weather-beaten as the originals.

Up on the roof, workmen are installing steel plates, attaching them to rods fixed to the vaults below for greater stability. Fusetti ducks into a low opening at the rear of the church. I follow him onto a metal catwalk that runs below the roof and above the ceiling vaults the entire length of the 228-foot nave. From the dizzying vista outside, I enter the cramped attic space with a rush of claustrophobia. Illuminated by electric lamps and sunlight filtering in from the round window above the larger rose window at the church entrance, more workmen are laminating thin strips of wood and composite fiber to serve as reinforcing ribs for the vaults.

"The most serious structural damage was suffered right here in the vaults," Fusetti explains. "Until the scaffolding was built in the church--and that took six months--there was the risk that the remaining vaults could have collapsed at any time."

Before work could be done on the vaults, however, the restorers had to dangle from the catwalk to remove 1,300 tons of discarded rubble piled up from roofing operations over the centuries. Every ounce of this crushing weight had to be lifted out by hand and gently poured down an exterior chute snaking down the facade of the church. Originally it was thought that the weight of the rubble acted to shore up the vaults. But as the earthquake so catastrophically demonstrated, it only placed more, not less, strain on the arched ceiling. According to Fusetti, the vaults that fell gave way because they were situated at the two least flexible sections of the church--the entrance and the crossing of the nave and transept.

I ask about the concrete roof supports, installed in the 1950s, that some critics blamed for worsening the earthquake damage. Fusetti dismisses the criticism with a brusque wave of the hand. "If anything, the concrete supports helped the roof withstand damage," he replies with finality.

The two yawning holes in the ceiling have now been filled in with 35,000 handmade bricks. Kevlar strips crisscross the fissured vaults like giant Band-Aids. In an extremely delicate, time-consuming operation, restorers used syringes to inject more than a mile of cracks with a specially formulated mortar designed not to seep through to the frescoed surfaces.

*Clockwise, from top left: Paola Passalacqua is coordinating the reassembly of the fallen frescoes, including Saint Jerome and a Monk (pictured behind her) from the vault attributed to Giotto; early on, salvaged fragments are superimposed on a life-size photograph of Giotto's Saint Benedict, now nearly 80 percent complete; restorer Beatrice Dominici uses a syringe to inject a special mortar between the bricks of a damaged vault; another member of the restoration team uses a soft brush to clean a section of fresco.*



Gesturing to the series of massive steel collars recently bolted around the church's stone piers just above the ceiling, Fusetti explains how the collars shift the weight of the roof onto the walls of the church and away from the vaults. Next comes a steel belt girding the entire Upper Church at about 25 feet above ground level, a precaution intended to make the structure virtually earthquake-proof. Nothing would make Fusetti happier. "Before the ceiling fell on me, I always thought the basilica would be the safest spot in the region during an earthquake," he remarks dryly. "Now it really will be."



I follow the restorer down stone stairs inside a tower adjoining the apse and emerge into a gleaming forest of scaffolding. Virtually the entire Upper Church is filled from the floor to within seven feet of the ceiling with 18.6 miles of galvanized steel-tube scaffolding, specially engineered, says Fusetti, to help support the vaults--a lucky thing, since aftershocks continued up until June 1998. Over the din of clanging and banging, Fusetti explains that already the scaffolding is being taken down as the work of cleaning and restoring progresses from the apse toward the entrance.

Stretching a brush out to a wall fresco like one of Giotto's assistants, a restorer in a white lab coat dabs watercolor pigment from a palette along a filled crack, taking great pains to follow the lines of existing brushstrokes. "This area was badly hit, so it may take her a full week to paint over the cracks just in these two square meters of fresco," Fusetti explains.

Farther toward the entrance, he stops on the highest level of scaffolding at the august image of Saint Augustine--one of the vaults attributed to Giotto and his assistants--to show me how the cracked frescoes of winged rabbits, griffins and other mythological beasts are treated to keep them from flaking away. With surgical precision, restorers hold an overlay of rice paper against the frescoes, then brush the surface with acrylic resin to consolidate the pieces and bind the paint to the plaster and supporting walls beneath.

Almost close enough to touch, Augustine sits on his pale-aqua throne, inclining his venerable mitered head toward the spanking new rebuilt vault where Saint Jerome had been. The bare bricks of the vault appear particularly naked against the riot of colored frescoes surrounding them.

While Fusetti spends his days clambering over a gargantuan Erector set of scaffolding, the indefatigable Paola Passalacqua from Italy's Central Institute for Restoration labors over the world's most daunting jigsaw puzzle. In the cavernous former stables of a 15th-century pope, deep below both churches and the Sacred Convent, Passalacqua and her team of 15 expert restorers are piecing together frescoes by Giotto and Cimabue. When I visited, the restorers were scrambling to finish the Giotto saints from the archivolt by the reopening.

Spread out like patients on top of long white tables are giant blown-up photographs of the saints, ten feet long by five feet wide, all covered with transparent plastic sheets. Matching fragments have been carefully put in place on top of the plastic, their positions outlined with felt-tip pens. Luckily, the exquisitely detailed photographs were taken shortly before the earthquake as part of an exhaustive project by Ghigo Roli for U.S. publisher Harry N. Abrams to document the basilica and its artworks.

Workers circle the supine saints, trying to pinpoint the location of fragments based on their color, brushstrokes, preexisting cracks and other defects. When as many fragments as possible have been assembled on curved supporting panels, Fusetti's team of restorers will fill in the gaps with painted cross-hatching.

"From close up, you'll be able to see where the fresco has been reconstructed," Passalacqua points out. "But from the floor, you won't be able to notice."

In the days following the earthquake, cultural officials despaired that any of the collapsed frescoes could be salvaged. "Initially, there was no intention of putting the fragments together," says Passalacqua. "But when we began to find enough to reconstruct faces and hands, those of us working on the site became convinced the frescoes could be put together."

For Passalacqua and the many volunteers who arrived unbidden, sifting through the rubble for bits of colored fragments was an act of faith. Passalacqua, a fiery brunette with disarming chutzpah, discovered she had a gift for evangelizing the cause—with an unexpected boost from Saint Rufinus.

When the media first descended on the basilica, the quick-witted restorer elatedly held up the broken, but clearly recognizable face of the saint from the collapsed archivolt as triumphant proof that the impossible could be done. "The rest of the world was sure the frescoes were going back up, even though the officials weren't," she recalls with a sly grin.

Passalacqua's stubbornness has paid off. Once-lukewarm cultural authorities have since prevailed on the Italian government to finance a brand new lab. The size of a basketball court, the lab is tucked out of sight behind a cloister adjoining the Lower Church and will be equipped with high-intensity lamps, aerators to vent fumes and a bank of computers.

When I visited, Passalacqua was already in the process of moving into the new worksite. Stacks of trays filled with fragments and orange crates containing frescoed bricks were ranged along the walls. All told there are about 3,000 trays of fragments and bricks still to be reassembled.

While the Giotto fragments are being recomposed by hand, the Cimabue fragments are too fragile. Unlike Giotto's works, done in the long-lasting fresco technique in which paint is applied to wet plaster, Cimabue's were painted a secco—on dry plaster. "Each time you touched the Cimabue fragments, they became smaller," Passalacqua explains.

Enter the computer era. Using 3-D virtual imaging and an unlikely blend of high-tech and the restorer's art, engineers from La Sapienza University are devising an ambitious program to piece together the 100,000 Cimabue fragments. In the first step of the computerized recomposition, a technician from the university worked with two restorers in Assisi taking digital photographs of all the fragments and bricks and stored them on 290 computer disks. Compiling this digital archive was a massive undertaking, requiring five months to consolidate and mount the fragments, four linked computers and a specially designed camera snapping away ten hours a day for nine weeks.

Every fragment now has an assigned number, explains Domenico Ventura, the youthful restorer in charge of digitizing the fragments. The computer program will try to match up each fragment to the master photographs. Unlike a restorer, the computer is able to store the size, shape and color of all the pieces in its memory. As more and more fragments are matched up to the photographs, the program will become increasingly accurate in pinpointing the exact location of each fragment.

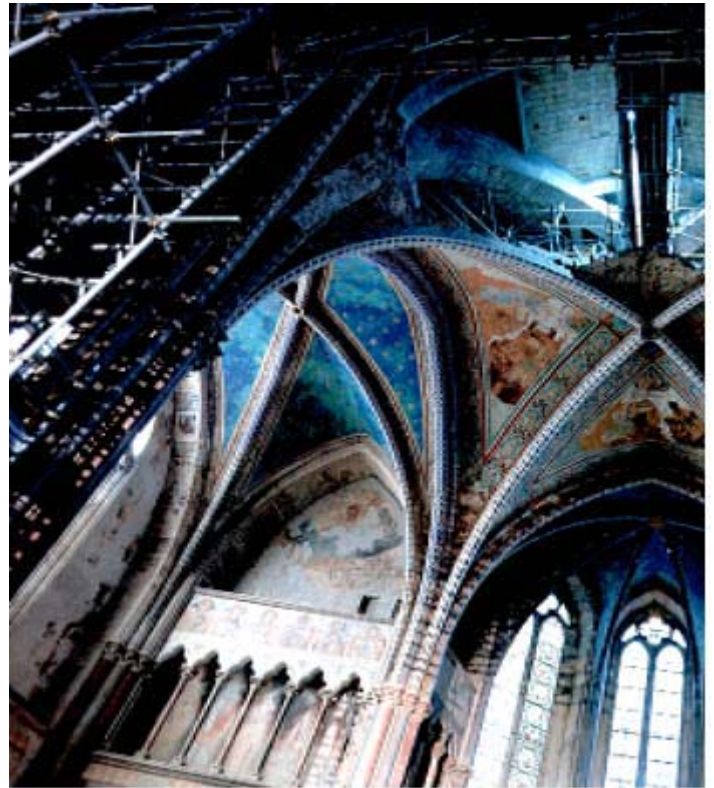
Instead of cybermagic, Passalacqua and company continue to rely on resourceful determination and intuitive skill. A student restorer at Assisi in the early 1980s, Passalacqua is driven by a deep-seated obligation to put the frescoes back on the ceiling. "It's not an artistic option; it's a moral necessity," she says.

Despite her persuasive conviction, a number of vocal critics insist that trying to reconstruct the frescoes is a waste of time. The late Federico Zeri, one of Italy's foremost art historians, told the Times of London in February 1998 that there was "absolutely no hope" of piecing the fragments back together. He suggested putting "the few fragments we have... in a museum" and saying to visitors: "this is all that is left of what used to be."

Even a sympathetic critic like Elvio Lunghi despairs of seeing the original frescoes back in place. "Where are simply too few fragments to go up," he maintains. "I say this as someone who spent all night with the fireman after the earthquake, shoveling rubble out of the church and a month afterwards sifting it to search for fragments."

Lunghi's proposal is to commission a figurative artist to execute a new work for the reconstructed vaults. Others favor installing reproductions of the frescoes or projecting photographic images of them onto the new vaults. At the time this article was going to press, a final decision about what to do had not been made.

*An elaborate web of steel-tube scaffolding, erected in the basilica to help support the vaults and protect them in the event of more tremors, brackets the void left by the collapsed section of vault bearing Cimabue's Saint Matthew and Judea and a section of starry sky.*



Whatever the passions and aspirations firing those intent on resurrecting the basilica to its former glory, there's an uncanny echo of the event that inspired Francesco di Bernardone to revolutionize the faith nearly eight centuries ago. Entering the crumbling church of San Damiano near Assisi, the 24-year-old Francis heard Christ on the crucifix speaking to him.

"Can you not see that my house is falling down?" asked the figure, in a metaphorical plea for Francis to renew the troubled established Church. "Go then and repair it for me." And so he did. Each in their own fashion, the restorers of Assisi have heard a similar call.

*A worker replaces damaged tiles on the roof of the Upper Church.*

By Richard Covington, who writes about culture and art from his home near Paris. Photographer Romano Cagnoni lives in Pietrasanta, Italy.