Photographer Gregory Crewdson says that his latest body of work, “Cathedral of the Pines,” was “not business as usual.” During staging and shooting in Becket, Mass., a crewman nearly drowned in a flood and a subject standing naked in the snow in subfreezing weather lost feeling in her feet. It took three shoots over three years to finish the series.

Mr. Crewdson takes photographs the way a director makes a movie. He comes up with a concept and composes a scene on location—often with a crew of 40 people. “I don’t even like holding a camera,” he says. “I see myself as a picture maker, where I’m interested in the thing that’s happening in front of me.”

From Jan. 28 through March 5, an exhibit of 31 works from Mr. Crewdson’s new “Cathedral of the Pines” series will be at Gagosian Gallery in New York. Many are ethereal, emotional images of intimate moments, often with nature in the backdrop, calling to mind 19th-century interiors and landscapes. In one image, two people talk on the porch of a small white house in a snowy winter scene. In another, a seminude woman sits on the back of a pickup truck surrounded by tall pines. At auction, Crewdson photos have sold for up to six figures and usually sell in the mid-to-high five-figure range.
The idea for the series started about five years ago, when Mr. Crewdson, now 53, was going through a divorce and taking a break from work. To stabilize his life and clear his mind, he moved to a town close to his childhood home in Becket, in the Berkshires. He bought a former Methodist church and a nearby firehouse and turned them into his home and studio.

He would frequently cross-country ski on the nearby trails. One day, he came across a small wooden trail sign that read “Cathedral of the Pines.” He decided he would set his next project among the trees in Becket. “I think at that moment the entire body of work came to me,” he recalls. “It was inspired by reconnecting to this place…and the sense of longing and loss, I think, too.”

Mr. Crewdson’s father was a psychoanalyst, and as a boy in Brooklyn, N.Y., Mr. Crewdson would listen through the floorboards to the patients in his father’s office in their home. He thinks that the perspective in his photos is similar to the point of view of a psychoanalyst. His pictures, he says, are “very intimate, private moments, but they’re photographed in a very removed…distanced way.” In analysis, “you speak about very private things in a kind of distanced way.” Mr. Crewdson’s honors have included the National Endowment for the Arts Visual Artists Fellowship and the Skowhegan Medal for Photography.

Growing up, Mr. Crewdson had been more interested in music than in the visual arts. He played guitar in a band called the Speedies. Mr. Crewdson started taking photos as an undergraduate at the State University of New York at Purchase. By his early 20s, he became inspired by the work of Walker Evans and Diane Arbus. In his mid 30s, he came up with his own cinematic style of taking pictures, with large crews and shoots lasting several weeks. Most recently, he only had 20 people on each of the three shoots, which he says is “by my standards fairly small.”

He starts by writing a one-page description explaining each moment that he will capture. “I’m not interested in before or after or the plotline,” he says. Then he scouts a location and hires a crew, and his “director of photography” starts shooting.

Digital photography and mobile devices, Mr. Crewdson says, have made images as transient as they are ubiquitous. “I want to sort of reintroduce some real, almost not traditional, things that really haven’t been in the discourse recently, like photographic beauty and form, pictorial space and psychological meaning,” he says. With all of his experience establishing scenes, he hopes someday to make a movie. But, he adds, “It’s also terrifying to me.”

For now, Mr. Crewdson is relieved to be working again. “When you’re an artist and you go through a period of not working for whatever reason, you feel fraudulent or you feel like you’re not alive in the fullest sense, so making these pictures just felt like a sense of reconnection,” he says.

For him, “Cathedral of the Pines” symbolizes new hope. His girlfriend and creative producer Juliane, an old acquaintance with whom he reconnected in Becket, is in some of the photos. “Although I have to say there is a certain sadness that runs through the pictures,” he observes, “this body of work to me is my most optimistic.”