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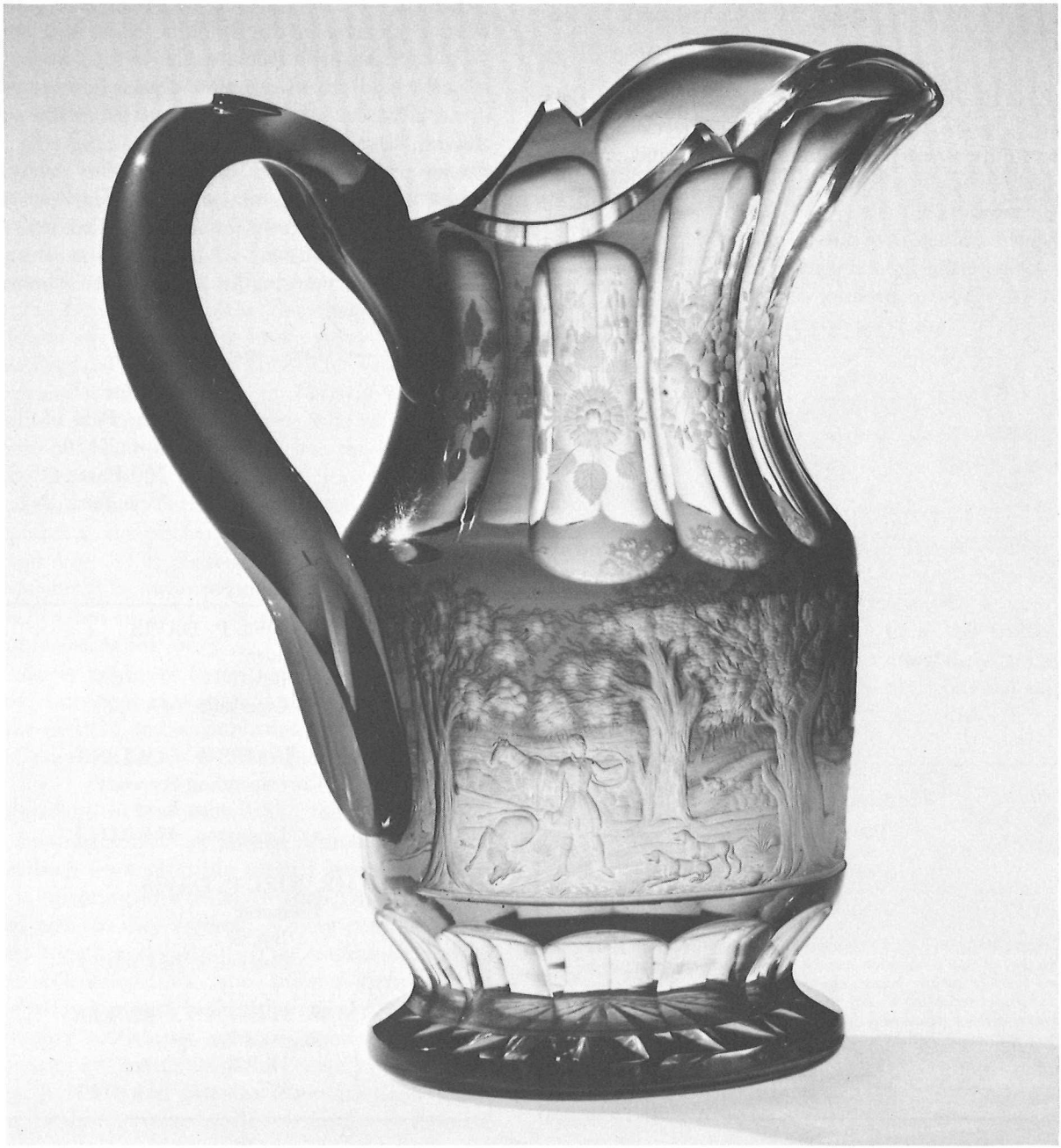


New England Glass Company cut and engraved pitcher, engraved by Henry B. Leighton.
The Corning Museum of Glass. (73.4.28; H.17cm.) Gift of Marion Pike.

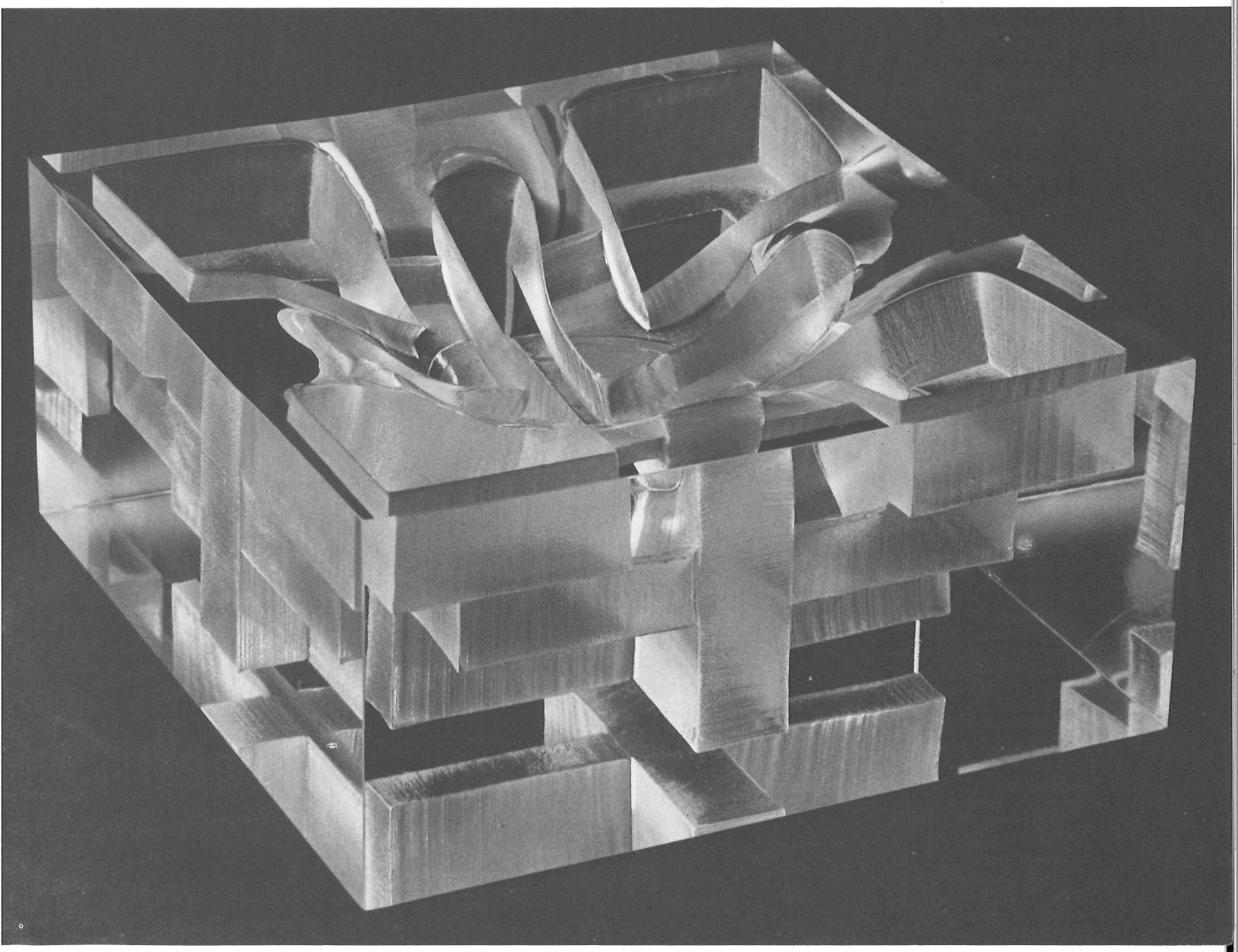
CAST GLASS BY STEVEN WEINBERG

By Paul Hollister

The adage that nothing is new under the sun would seem to have an exception in the cast glass of twenty-six year old Studio Glass artist Steven Weinberg, for it appears unlikely that anyone in the history of glassmaking — at least until recent years — has ever approached casting by his particular route. Casting in relief is well known, particularly after 1920 in the work of René Lalique and Frederick Carder. Casting experiments at Corning during the years 1931-1934 led to the successful casting of the giant mirror disk for the Mt. Palomar telescope, in which molten glass was poured (cast) into a complex, ribbed ceramic mold to combine maximum strength with minimum weight. But in the last five years Weinberg has developed something new: negative casting, in which the negative image left on removal of the mold becomes the positive image of his glass sculptures. But let me try to describe this uncanny transformation.

In the past two years Weinberg's glass sculptures have been contained in square blocks of greenish plate glass approximately eight inches on a side by four inches thick, and are thus easy to study as a group. Weinberg begins with a powdered mixture of 50% plaster and 50% silica the consistency of talcum powder. The silica is included because without it the plaster would begin to bond with the glass at the working temperature of 1600 degrees Fahrenheit. Weinberg adds water to the mixture and casts or molds it into basic square and round geometric forms that are the building blocks of his sculpture. These solid geometri-

Photo Peter Kolk



cal units or modules are strewn about an area of his Providence, Rhode Island studio like building blocks in a child's playroom.

Weinberg plays with his blocks, trying different combinations of shapes, cutting through planes of the assembly with a bandsaw until he gets a geometric conglomerate that has a sculptural presence. Then he places the sculpted plaster in a square mold and casts (pours) the hot plate glass over it. The assembly is then annealed and the plaster removed.

that imprisons it, like the marble blocks from which Michelangelo's 'Prisoners' struggled to free themselves. Weinberg's unusual and difficult concept of a visually positive void imprisoned in a negative but solid framework of clear glass may have taken seed during a biology course he once took from Dr. Charles E. Smith of Buffalo. Dr. Smith described the body organs that are penetrated by the world outside the body — such as the throat, lungs, stomach, intestines — as the external body space. Internal body space is the space of the body

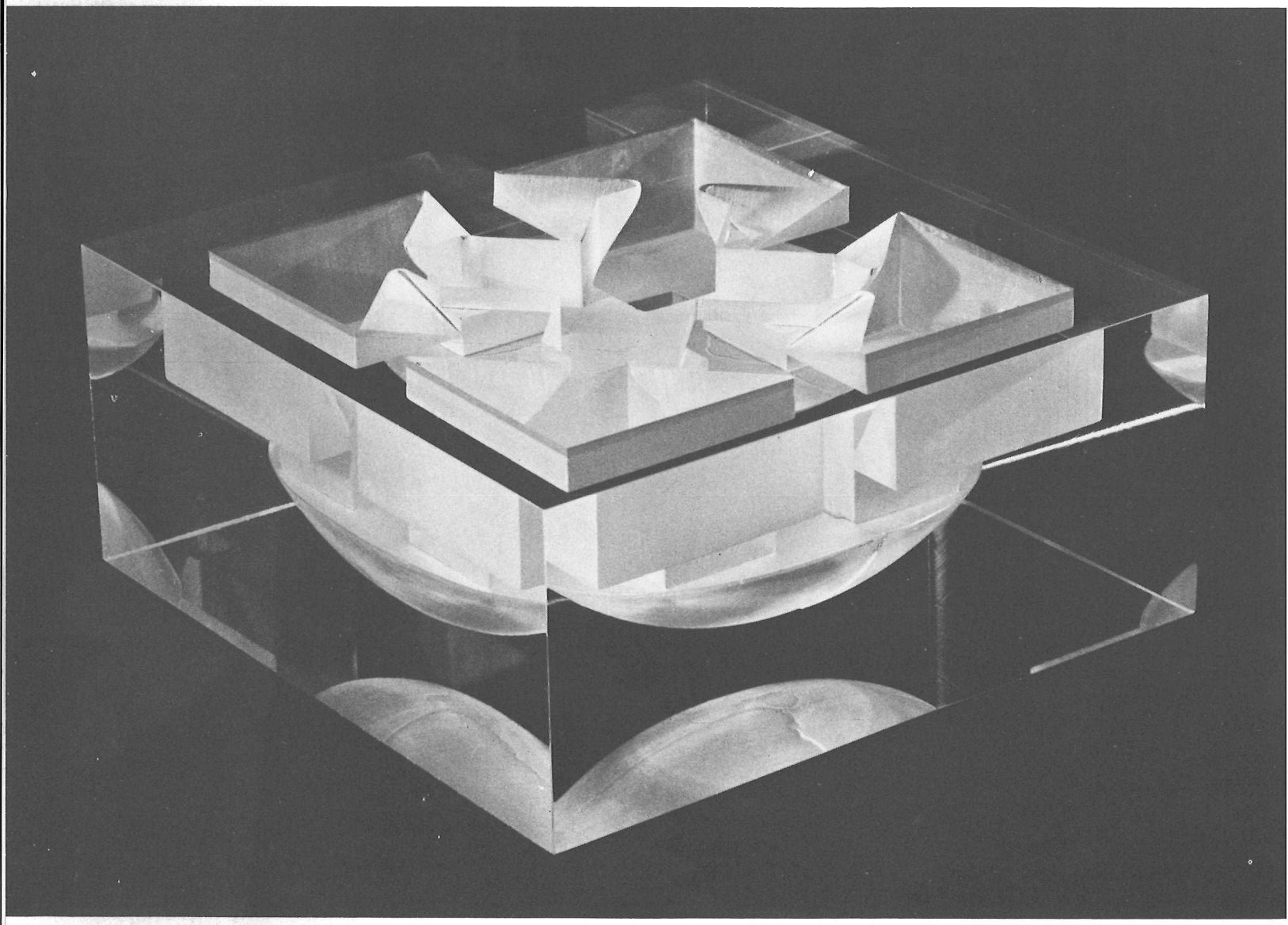


Photo Peter Kolk

We now have a glass block with a negative or intaglio cavity left by the sculpted (positive) plaster. In most casting processes, a negative impression is only a step toward production of a positive (relief) molding of whatever material is cast. But with Weinberg's pieces the sculptural void interacts with the surrounding glass

cavity between the organs and the outer skin. In terms of Weinberg's cubes the external space of the sculpted void is surrounded and supported by the quiet, inert inner space of the clear glass cube, which is literally its frame.

Weinberg does not rely on fancy imagery about his work; he calls his pieces "tabletop modules," which sounds rather static. On the contrary, casting glass over a form with a straight-sided framework is for him a contest between three-dimensional form and its containment. The more the form struggles to free itself from its container the more it defines its geometry and its rhythms. This basic struggle is recorded in a series of one of a kind "tabletop modules" that show Weinberg's development as a sculptor in glass. Two years ago, the square, eight-inch glass blocks were usually divided by a Greek cross or the diagonals of the Union Jack into four equal parts, which gave them a look of locked symmetry of awesome but static power.

However, as Weinberg continued to explore and vary the four-part designs, the interaction between negative and positive spaces became more interesting, more deceptive. What Weinberg calls "dangerous avenues" became a puzzle for the viewer. "Dangerous avenues" are those places on the flat surface of the glass where the inner hollow emerges to break the shiny smoothness. "Dangerous avenues" are tactile paths to the inner sculpture, and staring into these voids is like peering into the mouth of a cave. Confronted with these tactile puzzles it is easy to stub the finger, thinking one has found the opening. Apparent tunnels are blind alleys, openings and chambers are somewhere else. To enter Weinberg's sculpture is to enter a maze. One would have to be hard put to make a diagram of what is really going on inside the glass.

After removal, the plaster is found to have imparted a relatively smooth surface to the inner glass, while marks left by the bandsaw resemble the texture we see in buildings where concrete has been poured into wooden molds. To give the inner void a consistent texture, Weinberg frosts it by sandblasting. The frosted tone is grayer and lighter than the surrounding glass, like foam trapped in a wave. The greenish tone of the soda lime matrix is due to iron content. But Weinberg abhors what he calls "the kitschy-acryllic look of encapsulated space," the drive-in funeral parlor look of so much memento-enclosing lucite. And so he works to entangle the frosted look of the inside with the clear-smooth look of the outside, to merge all surfaces into one sculpturally integrated whole.

As he explores new possibilities within a form as restrictive to sculpture as sonata form is to music, Weinberg's imagination has gradually destroyed the symmetry of interior forms, moving them off center in terms of the square frame. He adds a shape here, cancels a balance there, aborts a passage, turns his geometry upside down. "Some of my pieces remind me of driving along Route 95 in Stamford, Connecticut," Weinberg says, "where oddly-shaped new buildings are springing up. In some the upper stories project over the lower ones, opposing shapes sit on one another." He wants to bring architecture to his pieces, and he seems to be doing just that. Recently, he began reheating supposedly finished pieces to the point where the unsupported bridges of glass at the top sagged into

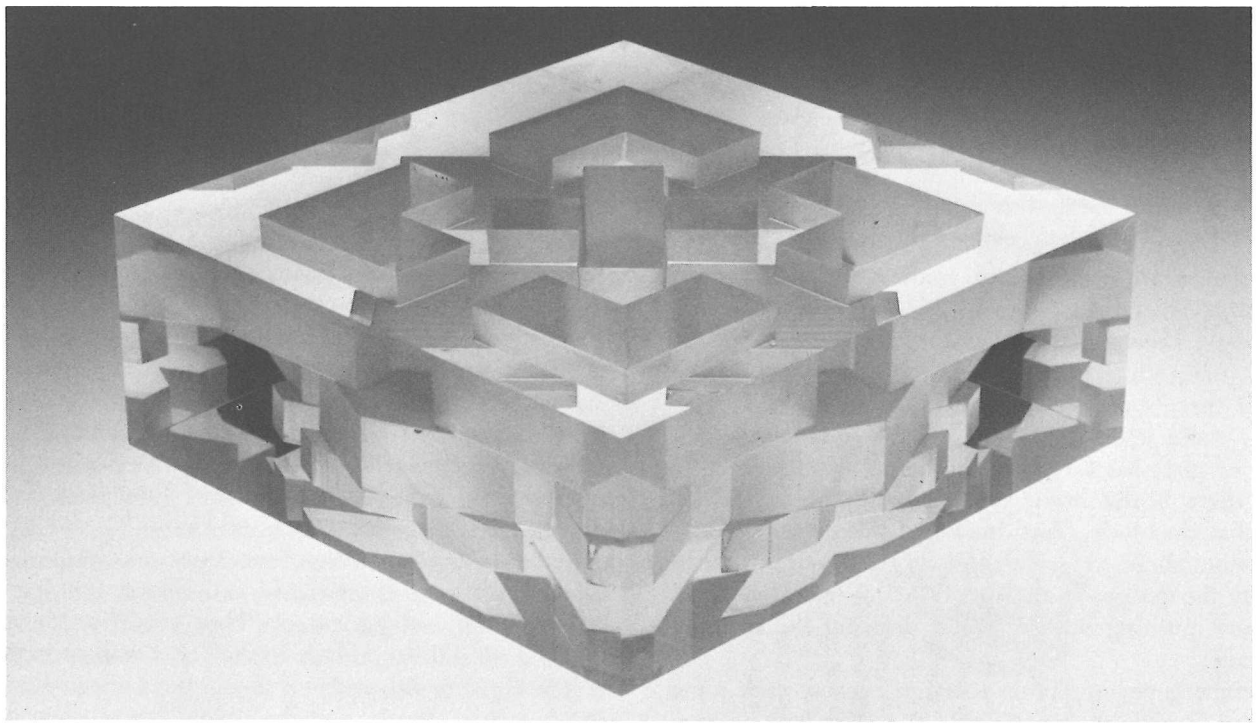


Photo Ira Garber

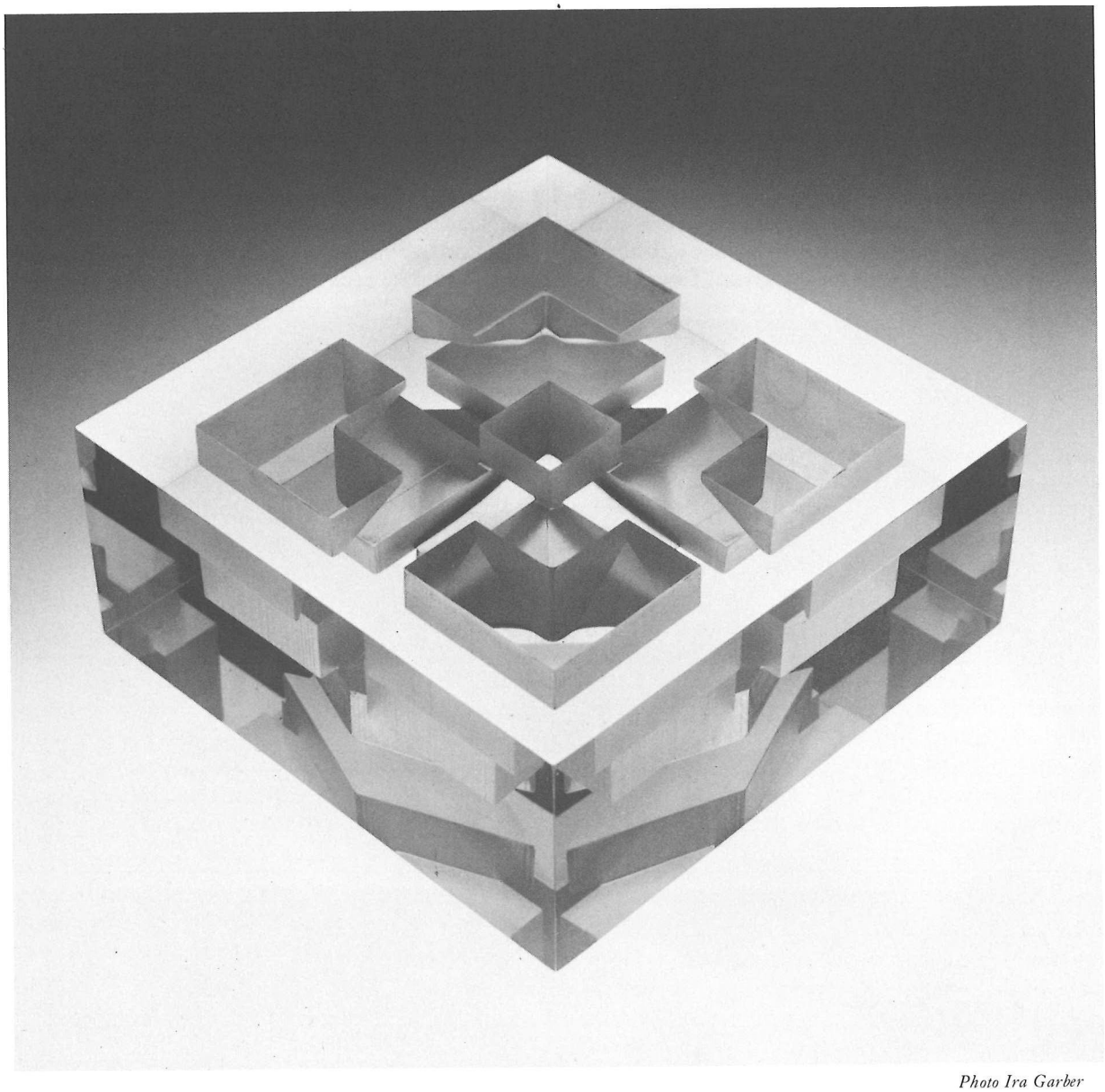


Photo Ira Garber

the inner space, like ramps leading to subterranean buildings or garages. In one piece the inner form, twisted on its axis, has broken through the side. All of this is very architectural, even in such a restricting size.

Call them architectural or sculptural, lay one piece flat or stand it on edge, it makes no difference: each block of glass has a tremendous impact on the viewer. First there is the mass, the compact bulk and sheer weight of the block, like a bucket of water to be hauled, or a wave about to strike the wader. One is struck as well by the design — slowly advancing from the interior, now pushing outward, now drawing the eye into the maze.

Weinberg never repeats a design because each piece suggests something new to try. But these are no easy conversation pieces. To begin with, the design takes a minimum of three days to compile. Casting and annealing require another six to eight days. Subsequent sandblasting and polishing averages a week for each piece. To finish a single work takes from three weeks to a month. Weinberg casts about thirty pieces a year. Of these he finds only fifteen or twenty acceptable; the rest are cut up and remelted as cullet for other pieces.

Weinberg, who has a Master of Fine Arts degree from the Rhode Island School of Design, is one of the most promising members of an American Studio Glass movement that is currently in full flower. He has exhibited widely — he was in "New Glass" at Corning last year — and his work is in the permanent collections of The Corning Museum of Glass, the Lannon Foundation in Palm Beach, and the Leigh Yawkey Woodson Art Museum, Wausau, Wis..