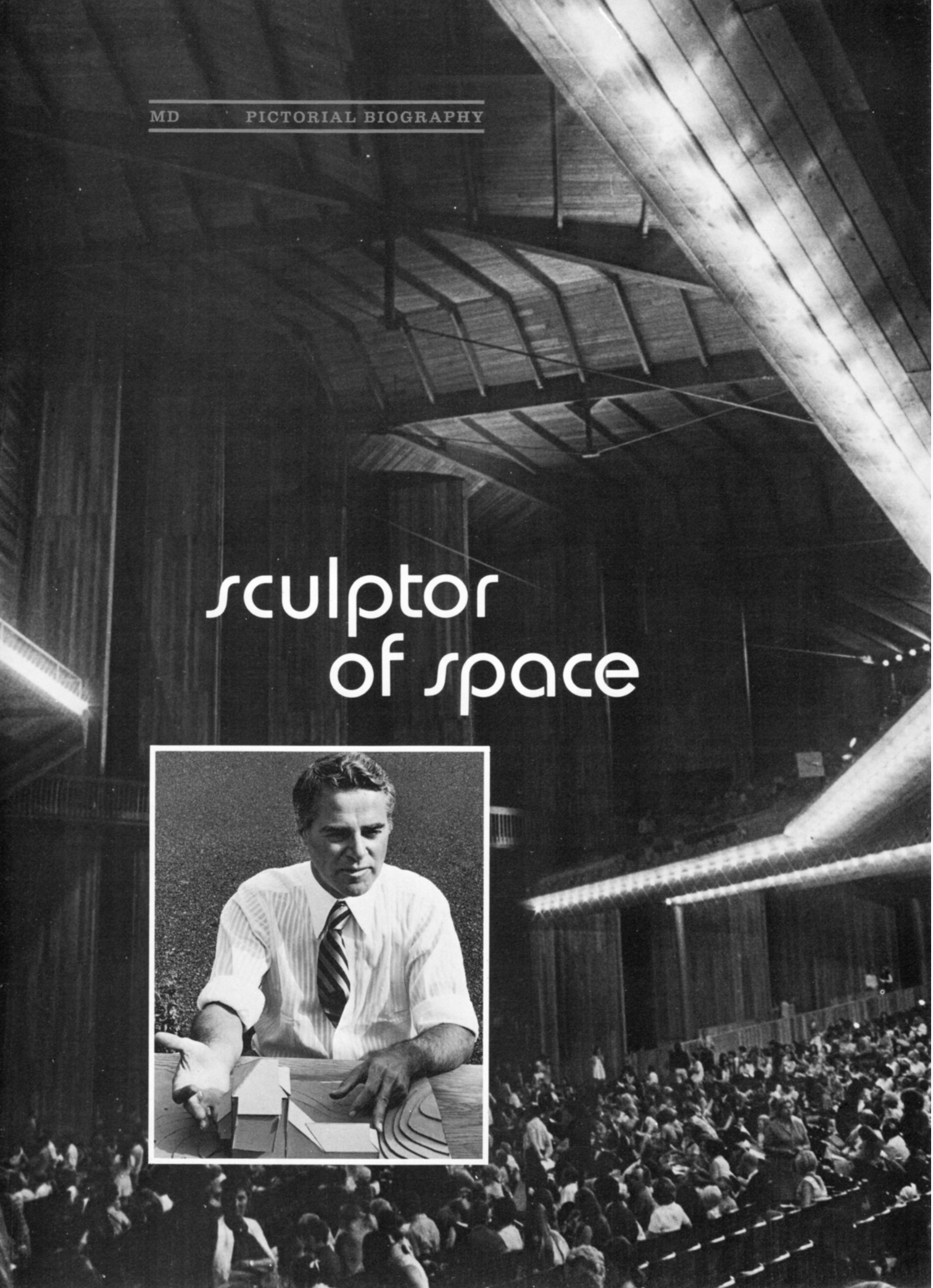


MD

PICTORIAL BIOGRAPHY

sculptor of space



EDWARD F. KNOWLES, one of the architects of the Performing Arts Center at Wolf Trap National Park in Virginia and Boston's City Hall, recently transformed an abandoned police department stable in lower Manhattan into a luxurious home with an indoor swimming pool, soaring atrium, spacious art gallery, and huge studio for painter Lowell Nesbitt. The magical metamorphosis of the old structure, as well as many dwellings and public buildings originally designed by Knowles, demonstrates his genius for molding space into elegant, functional forms. The stable-turned-showplace also exhibits the architect's ability to combine conservation and innovation harmoniously. He believes that "something good should be meticulously preserved" and he frequently highlights examples of fine old craftsmanship by presenting them in a fresh new setting.

In contrast to many contemporary architects, whose works are

cold, impersonal steel and glass boxes, Knowles designs buildings for people, their human needs and activities. He follows the dictates of the environment and produces structures that are appropriate to the surroundings and that clearly state their purpose through the use of well-conceived forms and textures.

Lyrical Designs. "Music in space," philosopher Friedrich von Schelling's definition of architecture aptly describes the center that Knowles and John H. MacFadyen designed for Wolf Trap, the first national park specifically for the performing arts. The vast but lyrical open auditorium of Western red cedar, that is weathering to a lustrous silver, harmonizes with the cadences of the landscape, responds to the tonalities of the Virginia hills, and is atune to the requirements of the performers and audience. Built on land and with \$2 million contributed by Mrs. Catherine Filene Shouse, the amphi-

theatre provides seats for 3500 guests under the roof and 3000 on the lawn. The acoustics are so fine that all the notes carry to the far-flung audience and the musicians can hear each other play. The center is equipped with elaborate backstage facilities for operas and concerts, and it is so skillfully planned that guests have easy access to their parked cars after a performance.

The Brooklyn Academy of Music also shows evidence of Knowles' fine hand. He restored a marble mosaic floor in the venerable concert hall, refurbished various interior areas, and designed the LePerc space and handsome chandeliers for one of the lobbies. The New York City Center, where he has a rooftop office, has received his touch in the form of art exhibits that he arranged in the building. When the Manhattan School of Music took over the Julliard School's old quarters, Knowles added a lounge and dining space



Title page, interior of the Filene Center for the Performing Arts at Wolf Trap National Park in Virginia designed by the architect Edward F. Knowles shown in inset and above viewing a model of the center with Stewart Udall, who was then Secretary of the Interior, and Catherine Filene Shouse, the donor of the center and site. Knowles, in white shirt at right, confers with staff members on the roof adjoining his office at the New York City Center.



and brought shafts of natural light into a dark locker room that became the center of student activity.

Transmutations. In transforming the house for horses into an artist's studio-home, Knowles designed a stunning pyramid-shaped skylight to infuse the dark recesses of the four-story building with a wide column of light. After insisting that such a skylight could not be built, the manufacturers finally produced a window to the heavens that fit without a leak.* Where once there were small stalls, the architect sculpted the area with broad sweeps of space for Nesbitt's mammoth canvases and at the painter's request a large whirlpool bath was installed in the master bedroom.

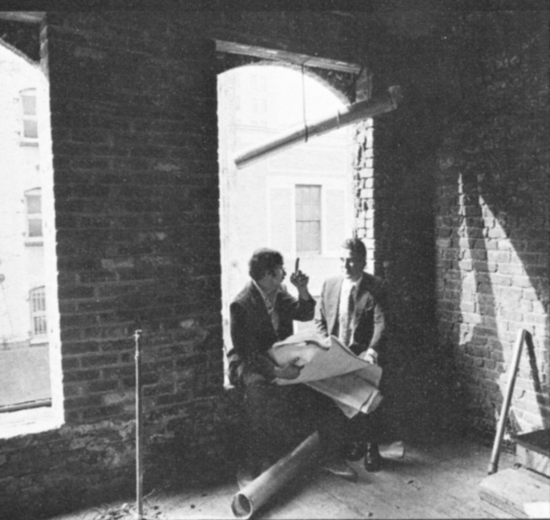
For a physician in upstate New York, Knowles created a series of gracious dwelling units from eight old farm buildings and an ice house. A warm haven for guests

* According to legend, Frank Lloyd Wright, who was Knowles' boyhood hero, told a complaining client: "All roofs leak."



Knowles, above, adjusts a sun screen in the beach house he designed for his family at Fire Island; right, with his wife Barbara and daughters Sarah and Emily in front of greenhouse he converted to a sitting room-orangery for a physician in New York State. Below, another Knowles-designed beach house is perched on six posts and has a clear view of the ocean.





Knowles and John LaVarca, builder, above, review plans to change stable, below, into a studio for Lowell Nesbitt. Right, during the conversion, Knowles, LaVarca, Mrs. Leonard Bernstein, and workmen on upper level inspect site of future swimming pool.



was fashioned from the ice house, a spacious banquet hall from one barn, while another became a comfortable sitting room with an adjoining orangery. The farm's greenhouse was revived in its original splendor and a cottage was raised on jacks and rebuilt from the bottom to form two apartments. Whenever possible the architect maintained the original timbers, beamed ceilings, and fine old masonry. He designed cherry wood chairs and a table for the dining area and a spiral staircase that is more interesting than many museum pieces of contemporary sculpture. Doors for the main house came from an old church, shutters for the kitchen from a 19th-century mansion, and careful, loving craftsmanship was provided by local workmen and a cabinet maker.

A Victorian townhouse in mid-Manhattan belied its narrow width after Knowles devised structural changes that permitted space to flow through the building to a backyard garden with a gazebo. For an I.B.M. office he developed an ingenious partition system that allows employees to personalize their individual work spaces.

Repertoire. Creative reconstruction is but one of many challenges that Knowles has met. His original work includes a shopping center in Naples, Florida, a Brooklyn department store, the Fairchild Experimental Laboratory in Yonkers, a large public school, and a hostel for the New York State Department of Mental Hygiene. He designed an expansive greenhouse for Louise Lippold, the cactus lady of the western world, a romantic pool house for a Briarcliff estate, and the inspiring Holy Trinity Church in Hicksville, Long Island.

In 1962 when Knowles was a partner of Gerhard Kallman and Noel McKinnell the team won the nationwide competition in which 255 entrants submitted plans for Boston's City Hall. The jury decided that the three young architects had solved the problem of designing an open, accessible structure through which the life of the city passes, not by the size or height of the building but "by its rich, expressive form" and sensitively scaled interior spaces. Dedi-



View of the completed atrium in the artist's studio, gallery and home, above, showing an indoor garden in the foreground, a display area for paintings on the far side and Knowles and Nesbitt beside the pool on the lower level. Right, Nesbitt surveys his new bedroom as Knowles points to a whirlpool bath that is big enough for six people. Below, the architect in the skylit greenhouse on the roof of the transformed building.





Converted barn with furniture and staircase that Knowles also designed.

cated in 1969, the \$26.3 million reinforced concrete City Hall in Scollay Square has been acclaimed as "magnificently monumental" without being austere or forbidding. The mayor's office and council chamber are identifiable from the outside of the building, which is built around a court and has a nine-story lobby.

The poetry, warmth, and humor that Knowles thinks is lacking in most modern architecture is notably expressed in his beach houses. One bisected A-frame perches high on a dune and provides maximum utilization of space even between the supporting piers. A slightly sunken kitchen surrounded by a counter in the living room-dining area permits the hostess, or host, to join the guests while cooking and keeps the preparation of food out of sight. Another wind-swept Fire Island house seems ready to take off for the sea but is snug and firmly anchored.

The poetic Fire Island haven that Knowles built for his family resembles an aviary with its pyramidal glass roof floating on a system of cantilevered beams and walls that slide open on clear days. Between the roof and walls a circle of large glass panes frames an ever-changing scroll of the surrounding trees, birds, and sky.

Beginnings. In Queens where he

was born August 12, 1929, Edward Frank Knowles was a small boy when he began building: scooters, tin-can contraptions, Tinker Toy and Erector Set structures, model planes. At the age of ten he fashioned a whole city of tiles that he "collected" from the construction site of a new house. By the time he was 13 he had read books by Frank Lloyd Wright and knew that he too wanted to be an architect, particularly when his aunt took him on a tour of Taliesin and other Wright buildings.

As a student at Brooklyn Technical High School, Knowles became interested in science, designed a model jet-propelled dirigible that flew, and developed a wide range of skills. He can forge a hammer, make a sheet metal duct, take a car apart and put it together again, and he is experienced in general construction, having worked summers at Levittown, Long Island, while he was attending Pratt Institute.

His decision to be an architect was reinforced when he heard a series of lectures by Philip Johnson. During his senior year at Pratt, Knowles and a colleague designed a central post office for his thesis project that received the top grade in the class. After graduating in 1951, he took a job as a drafting room apprentice and then served as

assistant to Abraham Geller before he opened his own office. He also taught at Columbia, Pratt, and Cooper Union, and he especially enjoys giving a course in textures so that students can gain a feeling for the appropriate materials for structures, furniture, and utensils, the vibrations of various metals, the grains of different types of wood which he calls "a second cousin to human beings."

From his youth Knowles has been highly interested in the performing as well as the visual arts. As a neophyte architect with little money he would sneak into the City Center at intermission for operas, concerts, and the ballet. Today the building is the site of many of his cultural activities.

Family and Future. In 1952 Knowles and Barbara DuPree, a gifted book designer who now works for Viking Press, were married. When their first child, Christopher who is now 16 years old, was an infant, they found that he had suffered severe brain damage from a prenatal toxoplasmosis infection. They later took him to the Institute for the Achievement of Human Potential in Philadelphia for the program in which normal patterns of limb movements are imposed in an effort to induce normal cerebral function. Returning home to Brooklyn Heights, the Knowles worked with the boy eight hours a day for six years. Today although Christopher has some problems, he has made great progress. Several years ago he performed in Robert Wilson's 12-hour play and co-authored with Wilson "A Letter to Queen Victoria."

The Knowles have three younger children. Sarah, a fair-haired, blue-eyed student at Stuyvesant High School, is interested in science and is a "whiz" in mathematics. Mary, an artistic, quiet, sensitive guitarist, aspires to be a physician. Emily, is a self-taught pianist and song composer.

Among the future projects of the *pater familias* is a striking duplex apartment for the top of a planned 20-story condominium. The design calls for a solarium, swimming pool with a sliding roof, and rooms opening onto terraces. 