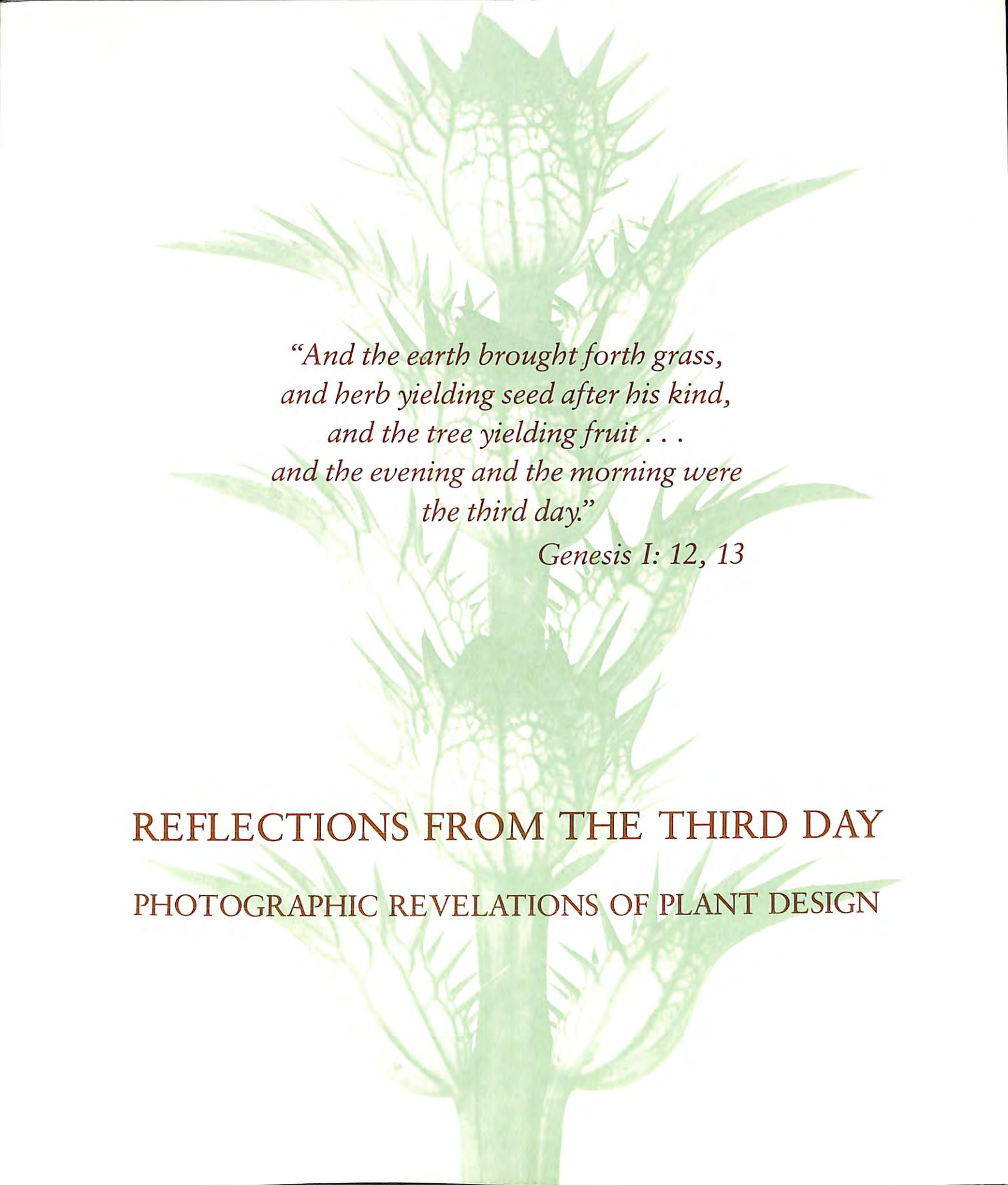




*“And the earth brought forth grass,
and herb yielding seed after his kind,
and the tree yielding fruit . . .
and the evening and the morning were
the third day.”*

Genesis I: 12, 13

REFLECTIONS FROM THE THIRD DAY
PHOTOGRAPHIC REVELATIONS OF PLANT DESIGN

Reflections From The Third Day

Photographic Revelations of Plant Design

Catalogue of an Exhibition
20 November 1978 to 16 February 1979

John V. Brindle and James J. White



Hunt Institute for Botanical Documentation
Carnegie-Mellon University
Pittsburgh, Pennsylvania
1978

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FOREWORD

"Nature has all the abstract forms that Brancusi or any artist could imagine."

The Daybooks of Edward Weston.

The series of exhibitions staged by the Hunt Institute from the early 1960s onward has dealt with the subject of plants as treated over the broad range of the history of botanical art and illustration in various modes—abstract, illustrative, decorative. Reflecting the material of our permanent collection, the media represented have been the traditional ones of painting, graphic processes, and many of the applied arts. It is time to recognize the distinctive contribution of photography in the field of botanical art.

This exhibition is an attempt to indicate something of the range and variety of treatment by photographic artists of the forms, structures, patterns and textures—in short, of the design—to be found in the world of plants. As a visual art medium photography has the unique virtue of absolute objectivity, and an unrivalled ability to record in definitive terms, in great detail, any subject capable of reflecting visible light. But photography has a versatility beyond what the naked eye can see or traditional graphic media illustrate. A camera linked to a reflecting telescope records the grand spiral of a far-off galaxy, linked to a scanning electron microscope, the fine structure of a single living cell. X-ray photography probes internal organs and structures. The astonishing geometries of pollen grains, the architectonic forms of vegetable growth, the shapes and colors of single flowers or habitat scenes, the foliage patterns of forest or meadow—all have been captured on film and laid down as two-dimensional images. Botanical painters and draughtsmen have responded to the same fascinations in their own manners. But the camera can probe, scan and describe in ways that have enriched and amplified our visual world.

It would be impossible for any modest exhibition to encompass the full range of plant-life photography; this show offers a selection of representative examples. The

original stimulus came from the collection of photographs by Karl Blossfeldt of plants seen as sculptural forms (published as *Art Forms in Nature* in 1928 and 1932). Plant morphology is there recorded by an eye sensitive to qualities of rhythm, proportion, symmetry and structural integrity—all functions of the laws of organic growth. Equally revealing, and even more surprising, are the greatly magnified images of individual pollen grains isolated by the Smithsonian Institution's scanning electron microscope and photographed by Dr. Joan Nowicke. They confirm an intuitive apprehension of the cosmological unity of organic design. If some of Blossfeldt's figures suggest architectural columns or decorative wrought iron work, these pollen grains can be seen as astronomical bodies or as glass paperweight designs. Sexual connotations have been attributed to the richly sensual "Magnolia blossom" by Imogen Cunningham and to Edward Weston's "Pepper". A spread of tree foliage, or of seaweed, could be a decorative tapestry; abstract shapes and significant form, great favorites of estheticians and critics, are well represented. But all these prints can speak for themselves. One virtue of such an assemblage is the opportunity it gives each viewer to find his own reminders and equivalents, or to eschew analysis and simply enjoy a selection of photographs that the Hunt Institute is proud to exhibit.

Note: This exhibition contains no photographs by Alfred Stieglitz, but his name occurs in several of the short biographical accounts at the end of this catalogue. He is, of course, a legendary figure in early twentieth century photography. What a contemporary critic wrote of him can be applied to much of the material of this show: "His prints delight us with their sheer beauty of form. They are photographic abstractions, for in them form is abstracted from its illustrative significance." By the example of his own prints, his early advocacy of "straight photography", his operation of the famous '291' gallery, and above all by the encouragement and counsel he offered to young photographers, his lasting influence is reflected in this and many another photographic exhibition.

Acknowledgments

The staging of this exhibition would have been impossible without the generous help of those who lent photographs. The Library of Congress collection was thrown open to us; Jerry Maddox, Patricia Hayes, and Leroy Bellamy gave us courteous cooperation. Evelyne Daitz of New York's Witkin Gallery took time from a busy schedule to show examples and arrange for their loan. Victor Schrager and Larry Miller of Light Gallery, also of New York, were likewise helpful, and steered us to Michael Hoffman of *Aperture* who made available

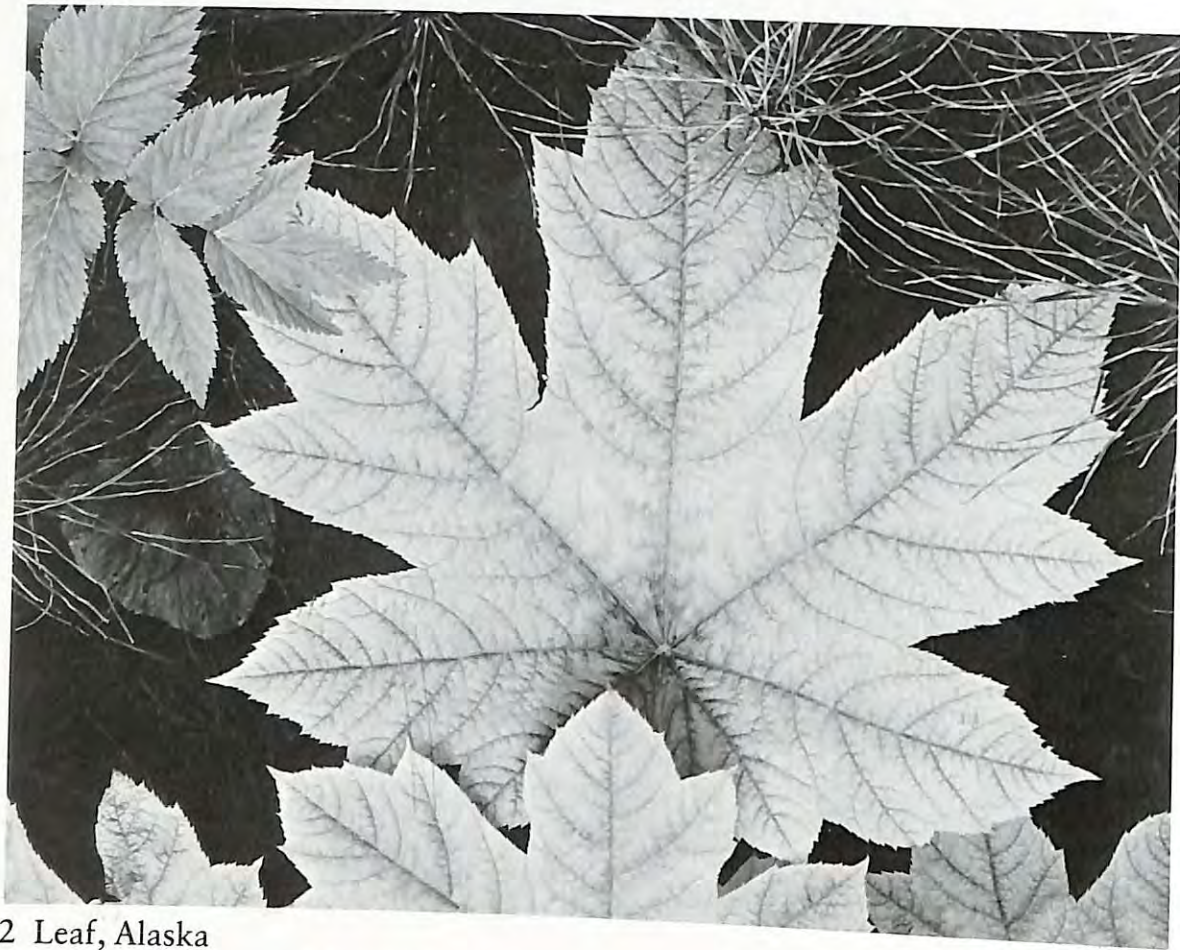
photographs from the Estate of Paul Strand and Hazel Strand. Andreas Feininger generously donated examples of his work. Dr. Joan Nowicke lent her pollen grain prints. Joseph Rosen, Harold Corsini and Clyde Hare, all on the staff of Carnegie-Mellon University, lent prints and helpful advice. David Aschkenas did likewise and furnished biographical information from his personal library. Dr. Robert Kiger, Director of the Hunt Institute, gave support, helpful ideas and suggestions when most needed. To all the above (and to anyone inadvertently overlooked) we are deeply grateful.

NOTE: Brief biographical accounts are included at the end of this catalogue.



1 Ferns, Hawaii, ca. 1947
Courtesy Light Gallery

Ansel Adams



2 Leaf, Alaska

Courtesy Library of Congress

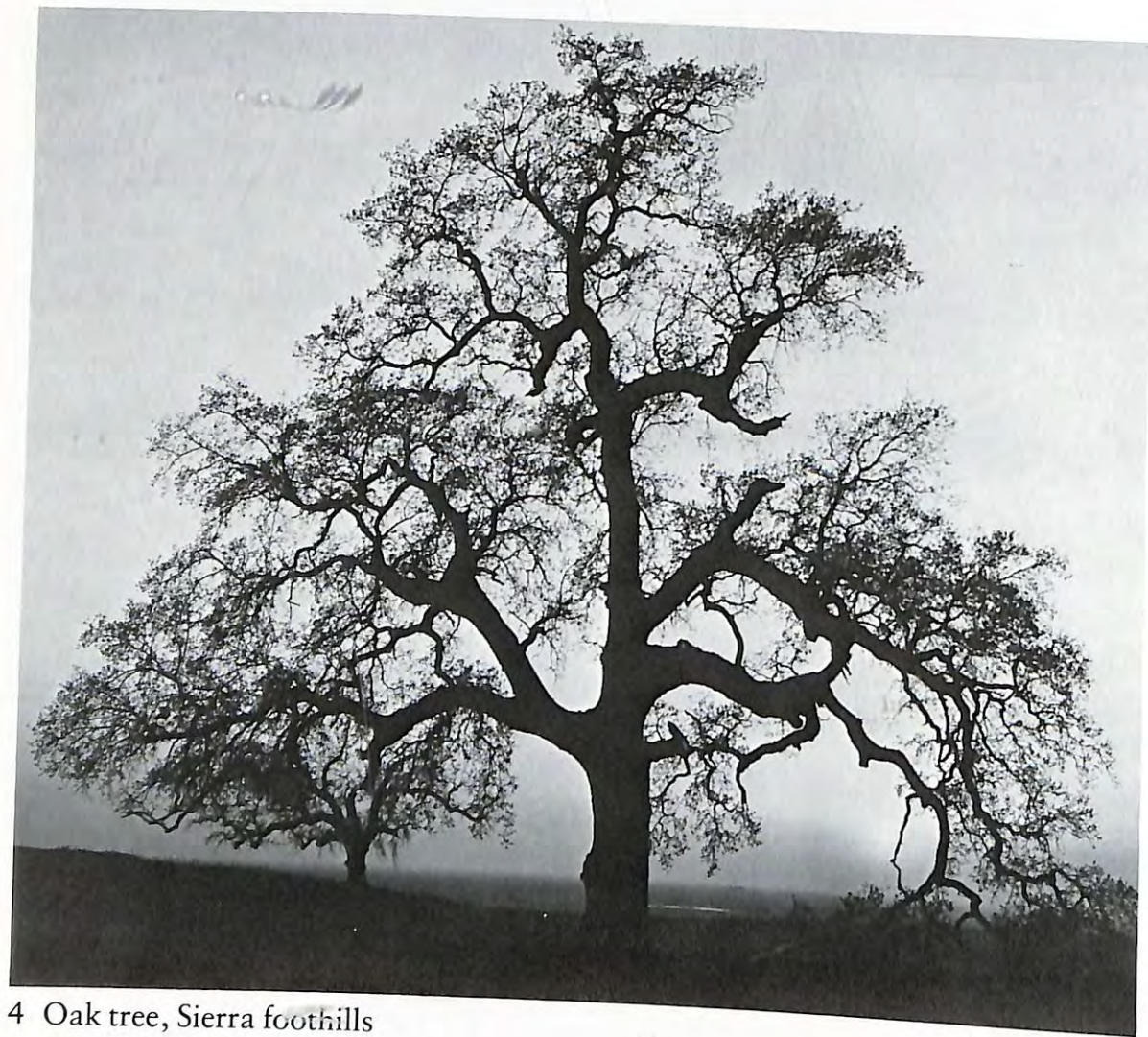
Ansel Adams



3 Orchard, Portola Valley, California, ca. 1949

Courtesy Light Gallery

Ansel Adams



4 Oak tree, Sierra foothills
Courtesy Library of Congress

Ansel Adams



5 Chrysanthemums in crystal vase
Courtesy Witkin Gallery

R. F. Ahern



6 Eucalyptus tree, 1975
Lent by Mr. Aschkenas

David Aschkenas



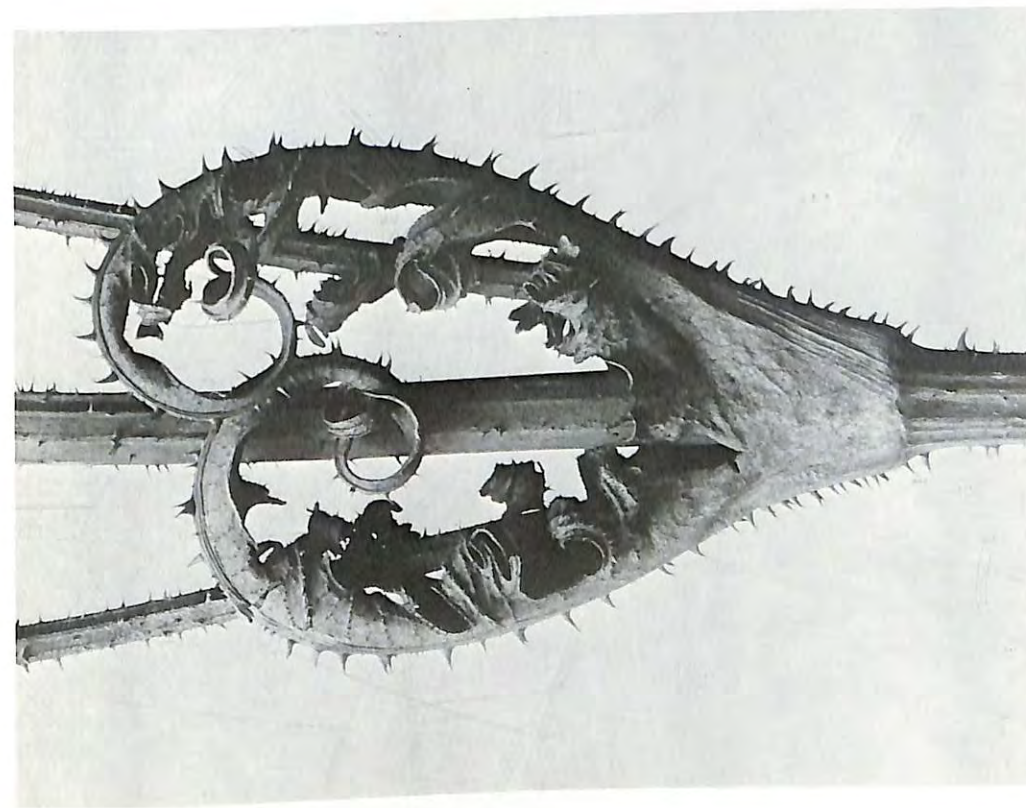
7 Fungus, 1975
Lent by Mr. Aschkenas

David Aschkenas



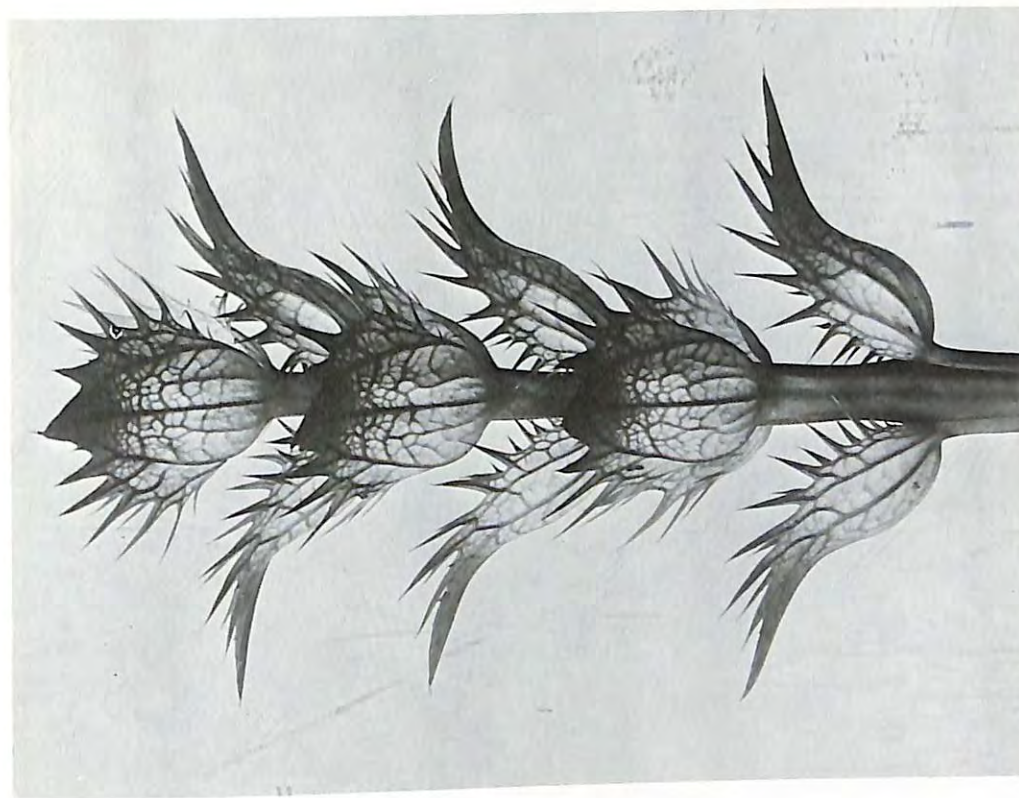
8 Tree, Michigan
Courtesy Library of Congress

Oscar Bailey



9 Dried Teasel

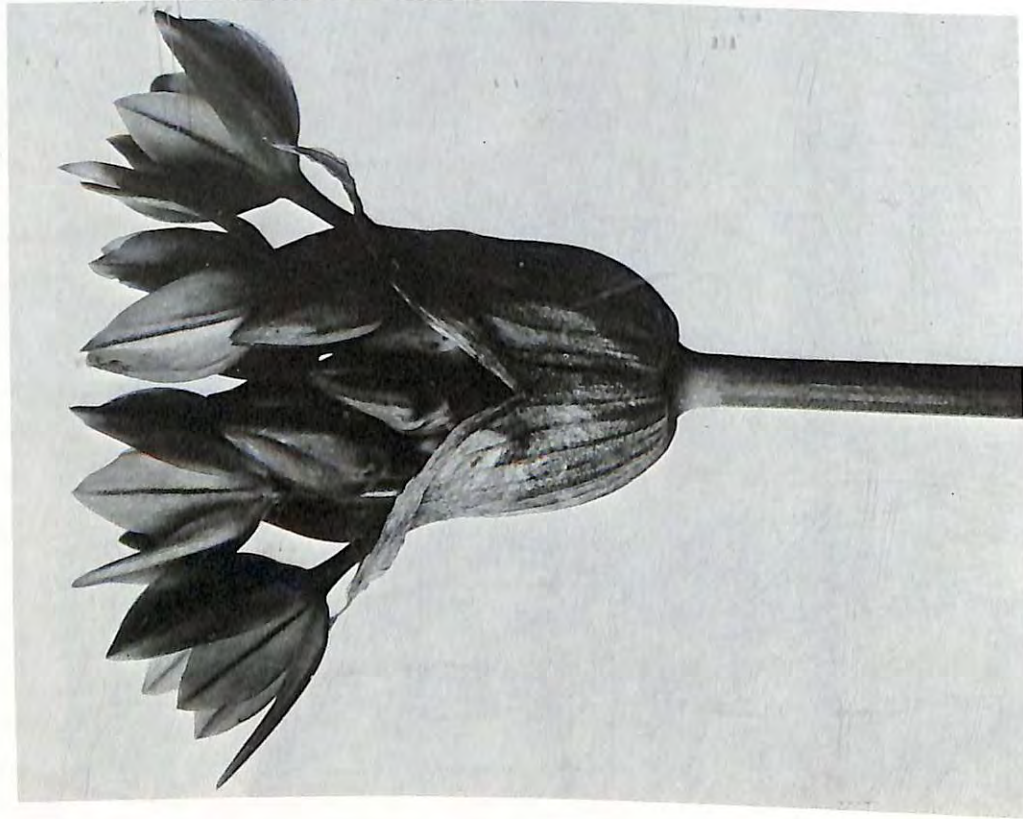
Karl Blossfeldt



10 Acanthus bracts

Karl Blossfeldt

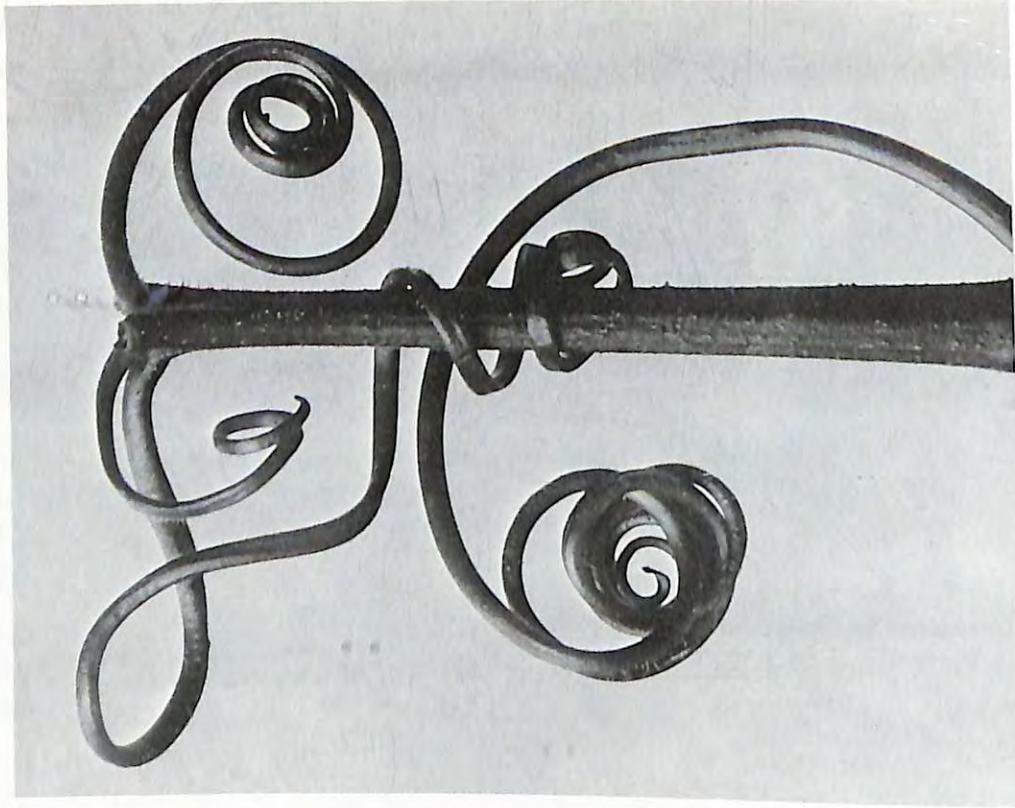
Courtesy Witkin Gallery



11 Garlic inflorescence

Karl Blossfeldt

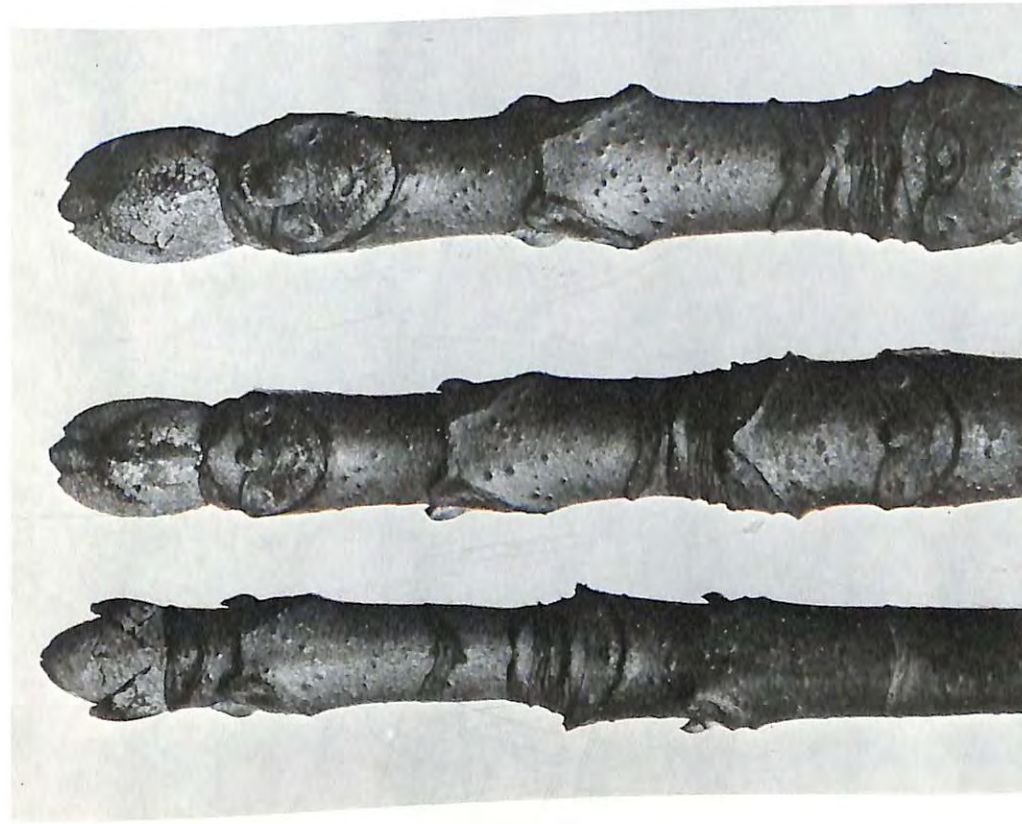
Courtesy Witkin Gallery



12 Pumpkin tendrils (x4)

Karl Blossfeldt

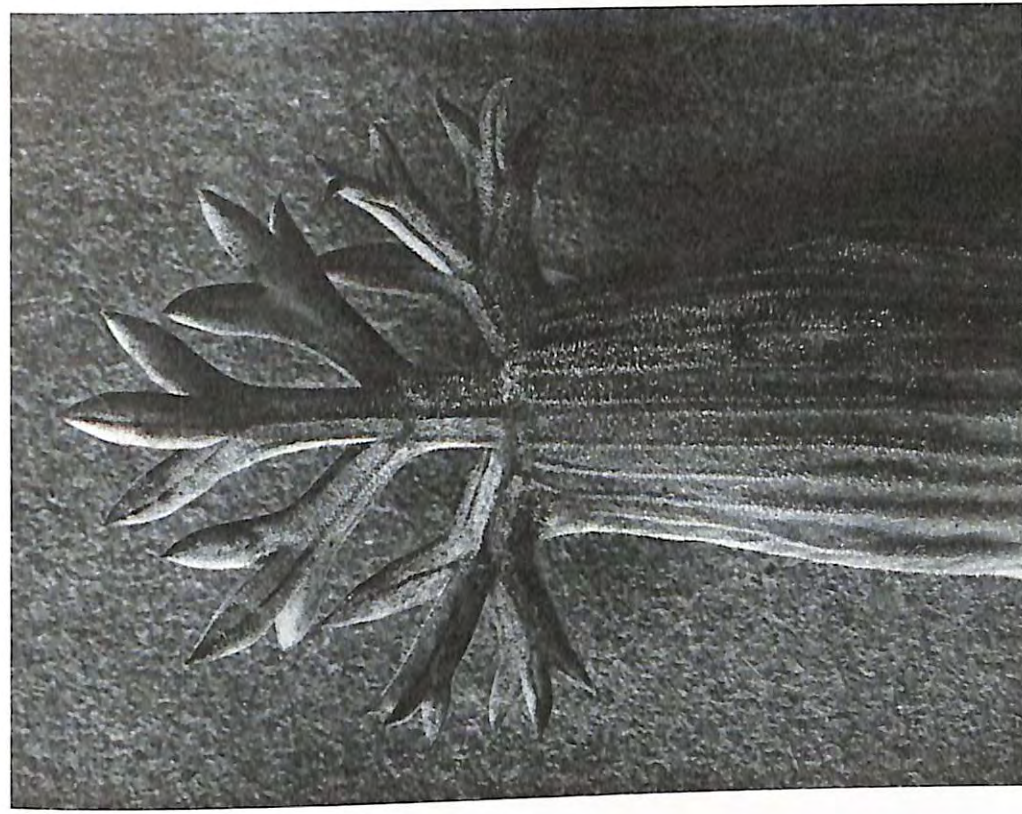
Courtesy Witkin Gallery



13 Horse-Chestnut shoots (x12)

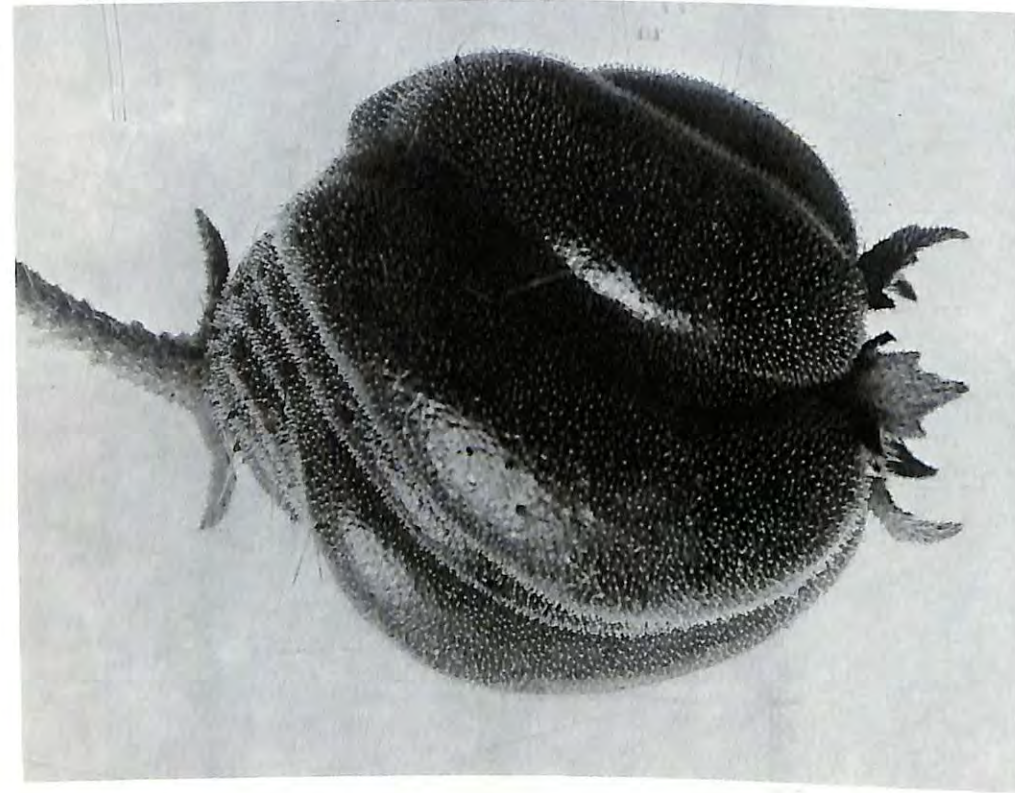
Karl Blossfeldt

Courtesy Witkin Gallery



14 Seseli bract (x10)

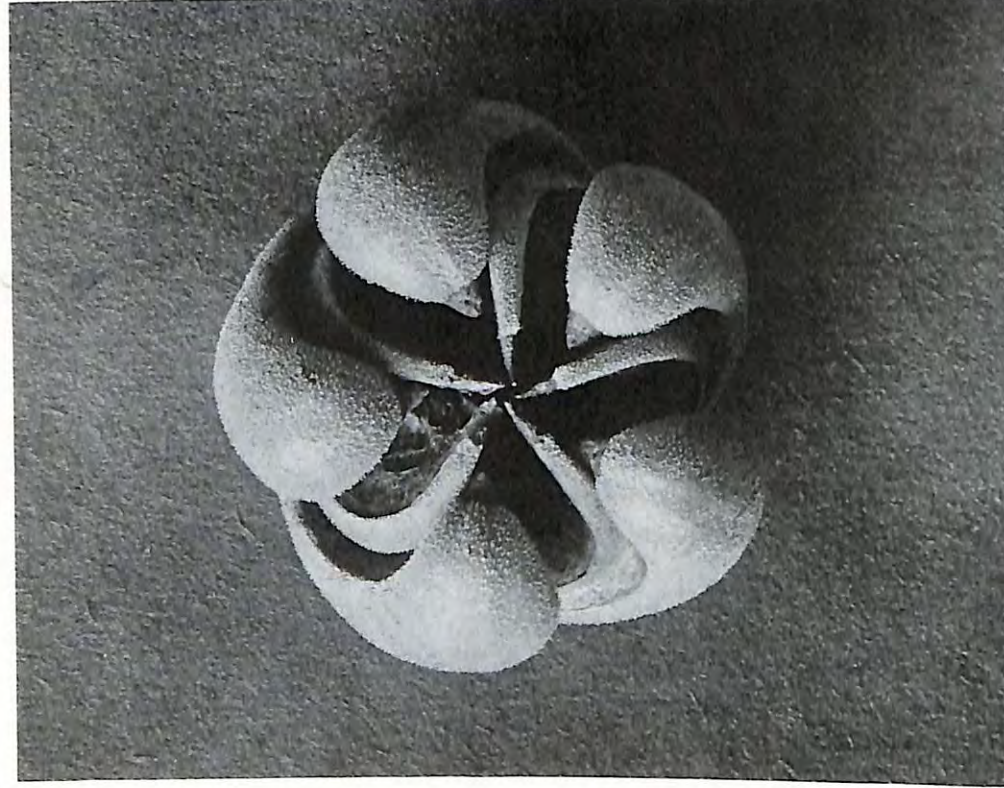
Karl Blossfeldt



15 Blumenbachia closed seed capsule (x18)

Karl Blossfeldt

Courtesy Witkin Gallery



16 Blumenbachia open seed capsule (x8)

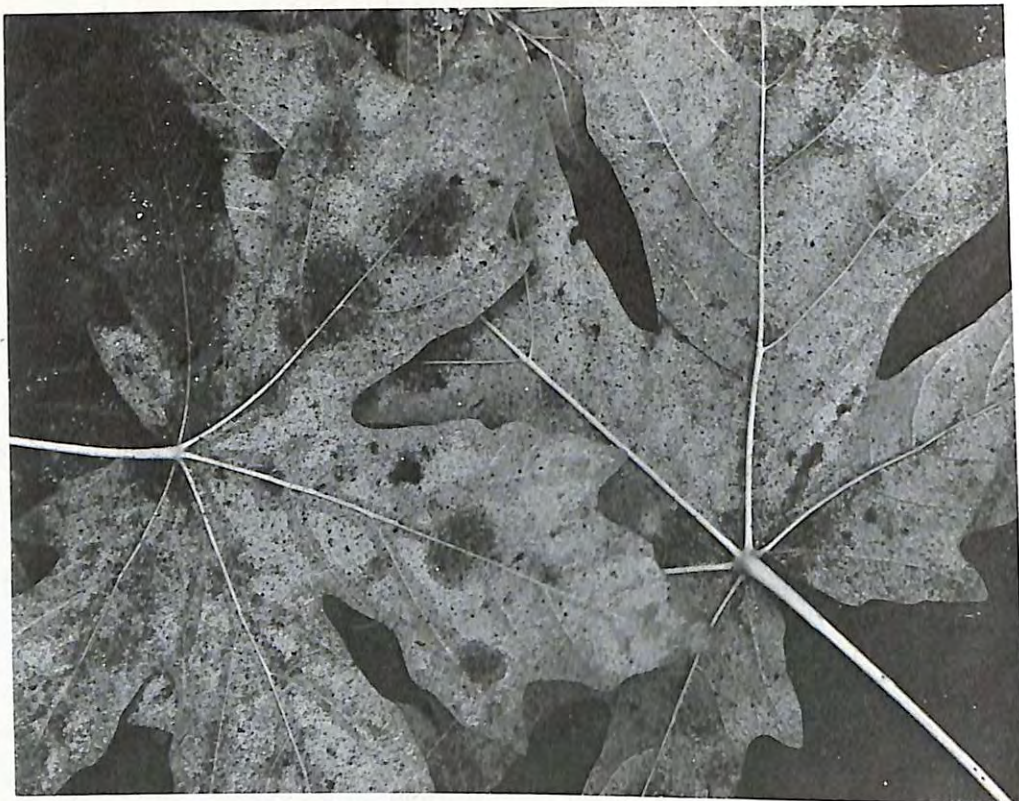
Karl Blossfeldt



17 Rockweeds, low tide (original in color)

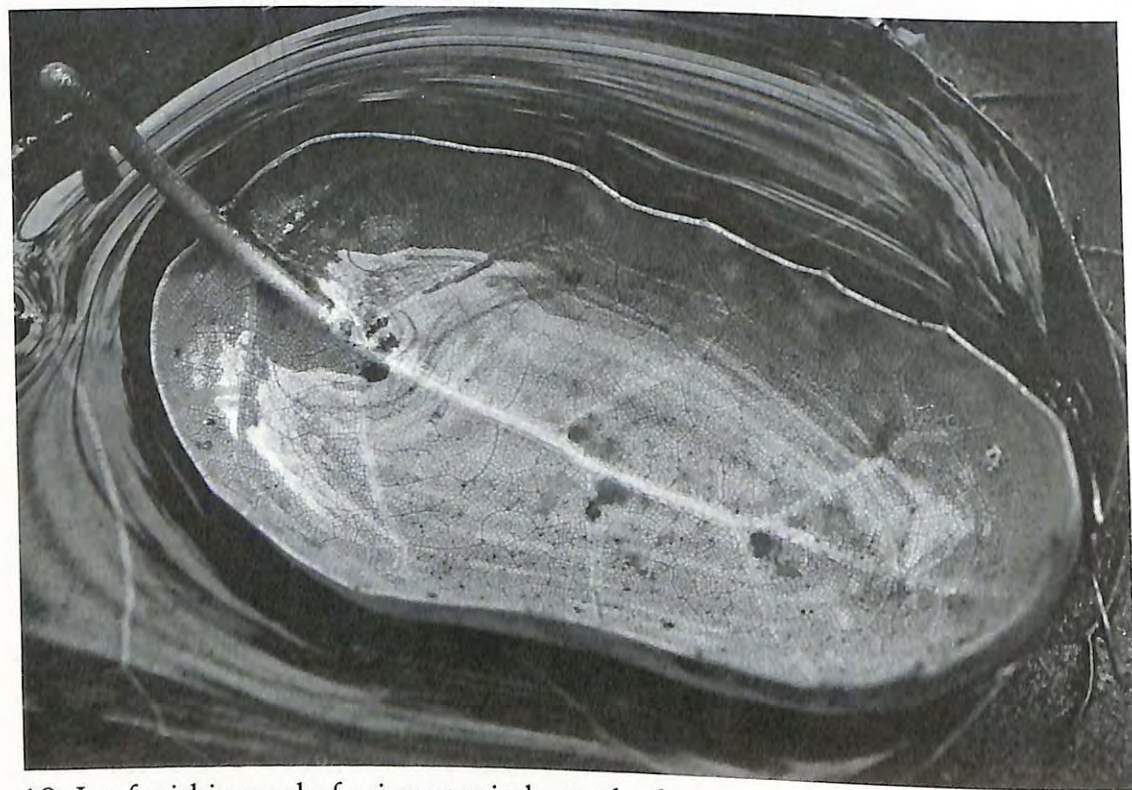
Dennis Brokaw

Courtesy Witkin Gallery



18 Leaves underwater, Big Sur, California
(original in color)

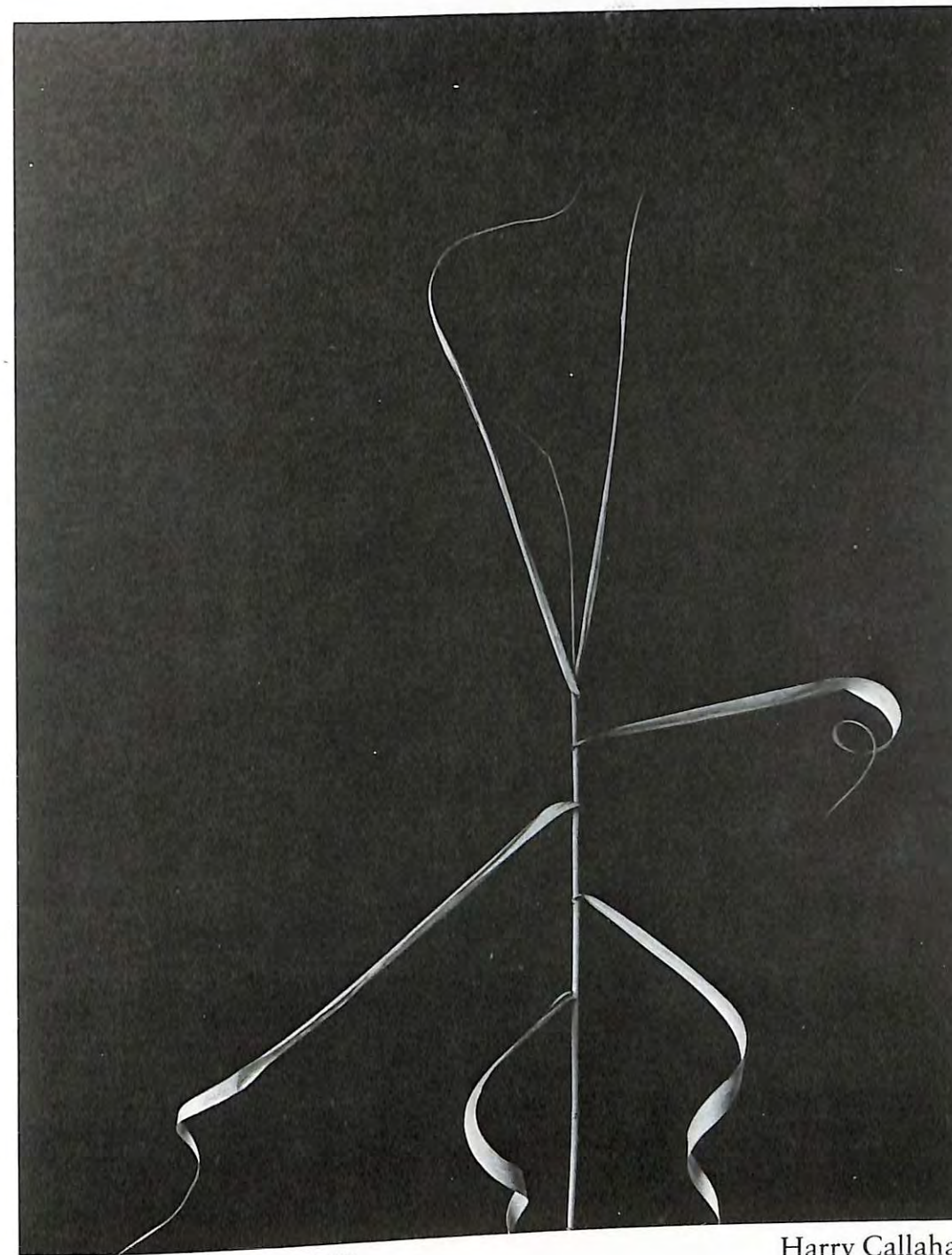
Dennis Brokaw



19 Leaf within pool of rainwater in larger leaf
(original in color)

Dennis Brokaw

Both Courtesy Witkin Gallery



20 Aix-en-Provence, 1958
Courtesy Light Gallery

Harry Callahan



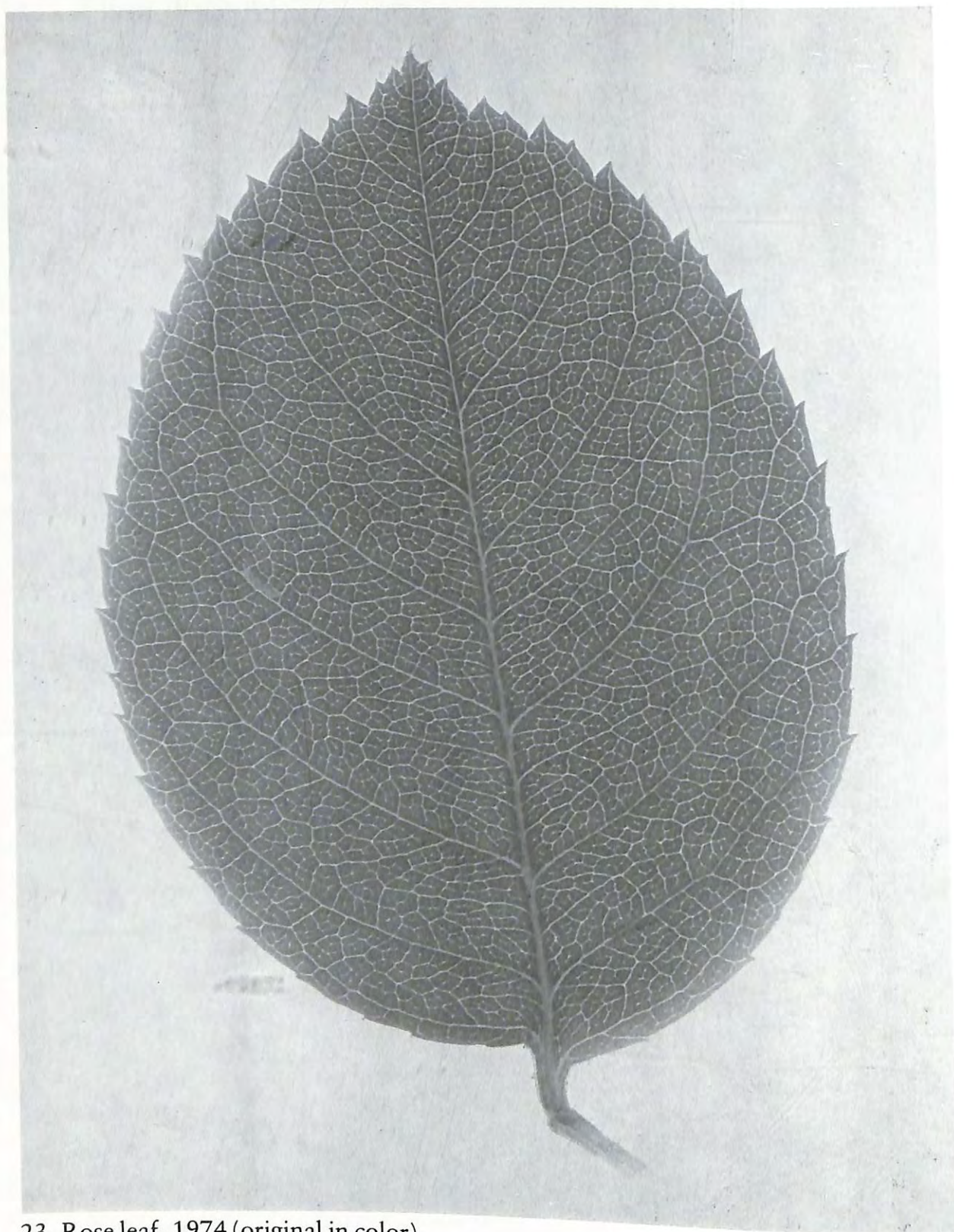
21 Detroit, 1941
Courtesy Light Gallery

Harry Callahan



22 Dandelion heads, ca. 1968
Lent by Mr. Corsini

Harold Corsini



23 Rose leaf, 1974 (original in color)
Lent by Mr. Corsini

Harold Corsini



24 Magnolia blossom, 1925
Courtesy Witkin Gallery

Imogen Cunningham



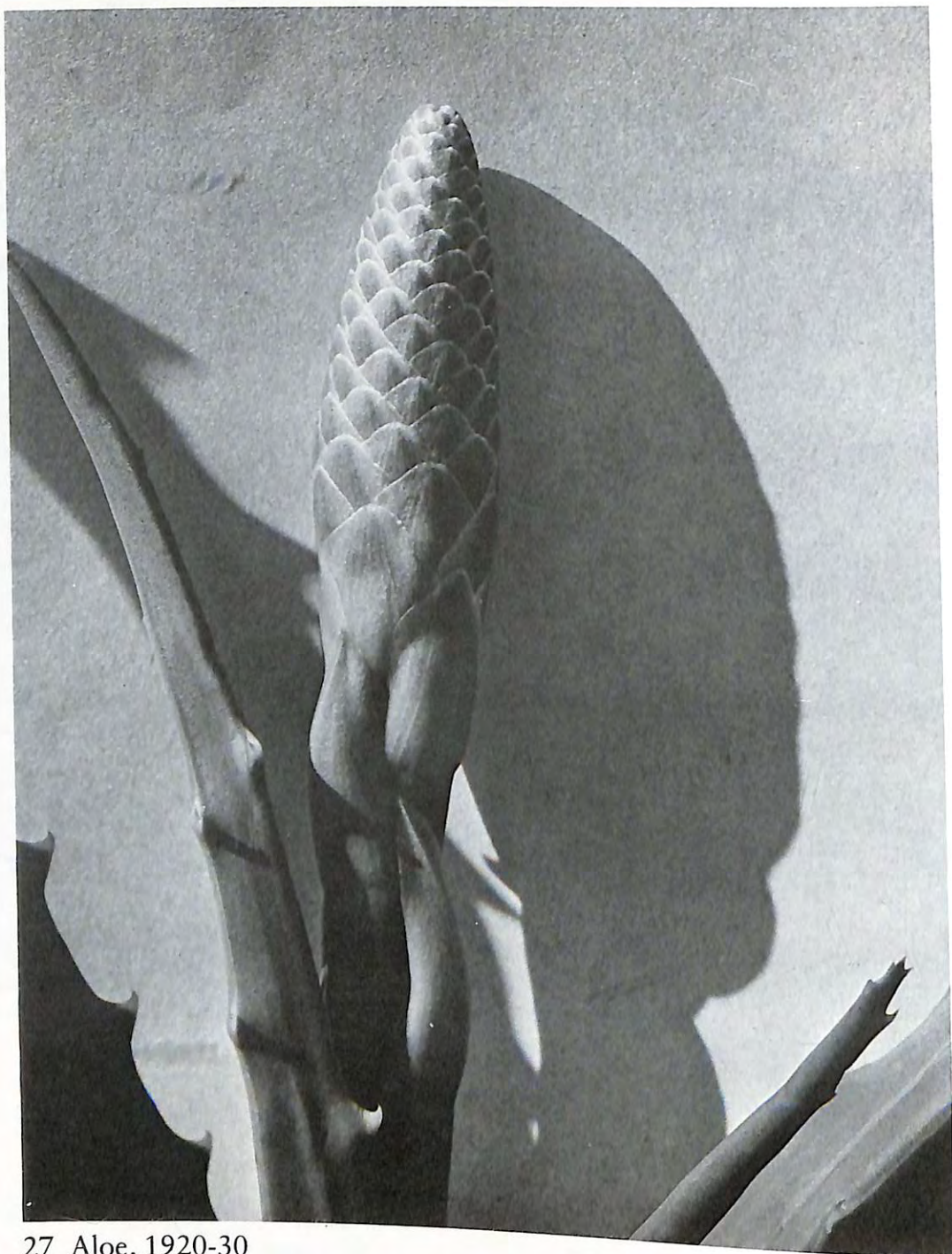
25 Datura
Courtesy Witkin Gallery

Imogen Cunningham



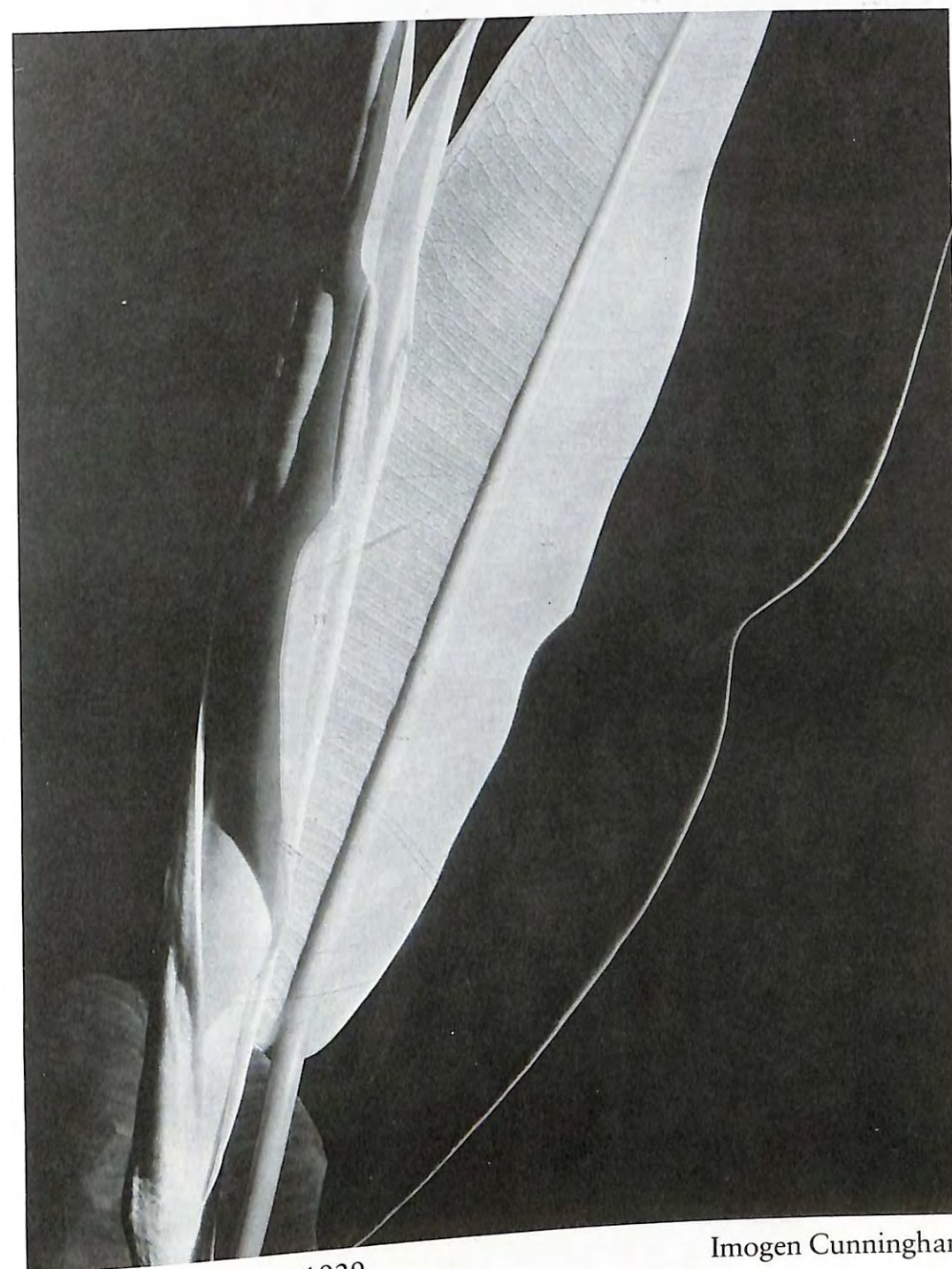
26 Tuberose, 1920-30
Courtesy Witkin Gallery

Imogen Cunningham



27 Aloe, 1920-30
Courtesy Witkin Gallery

Imogen Cunningham



28 Rubber Plant, ca. 1929
Courtesy Witkin Gallery

Imogen Cunningham



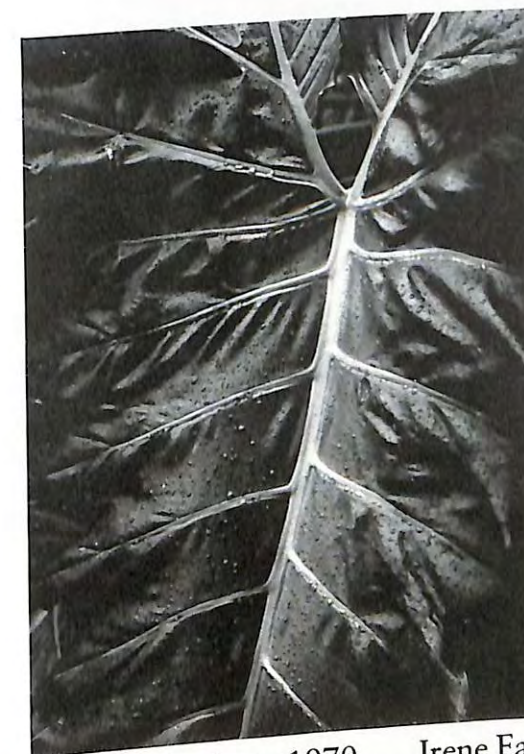
29 Sunflower
Courtesy Witkin Gallery

Jean Dieuzaide



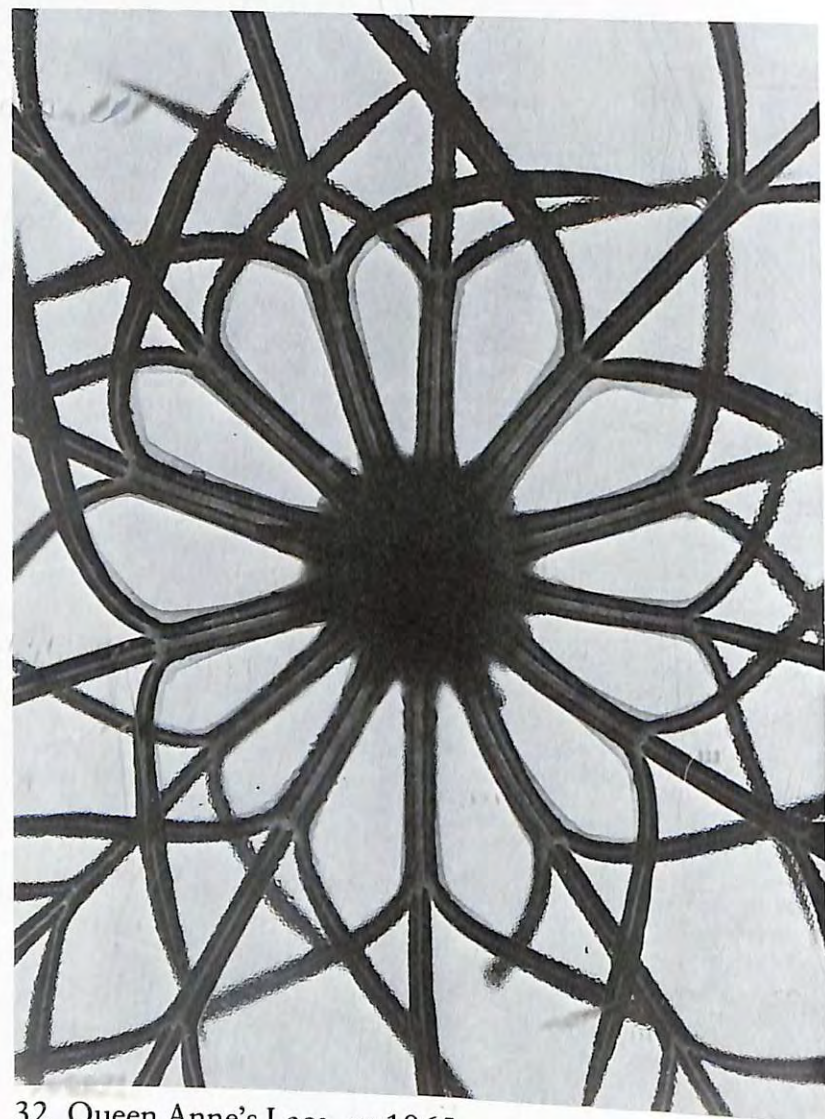
30 Daisies in evening sun, 1975

Irene Fay



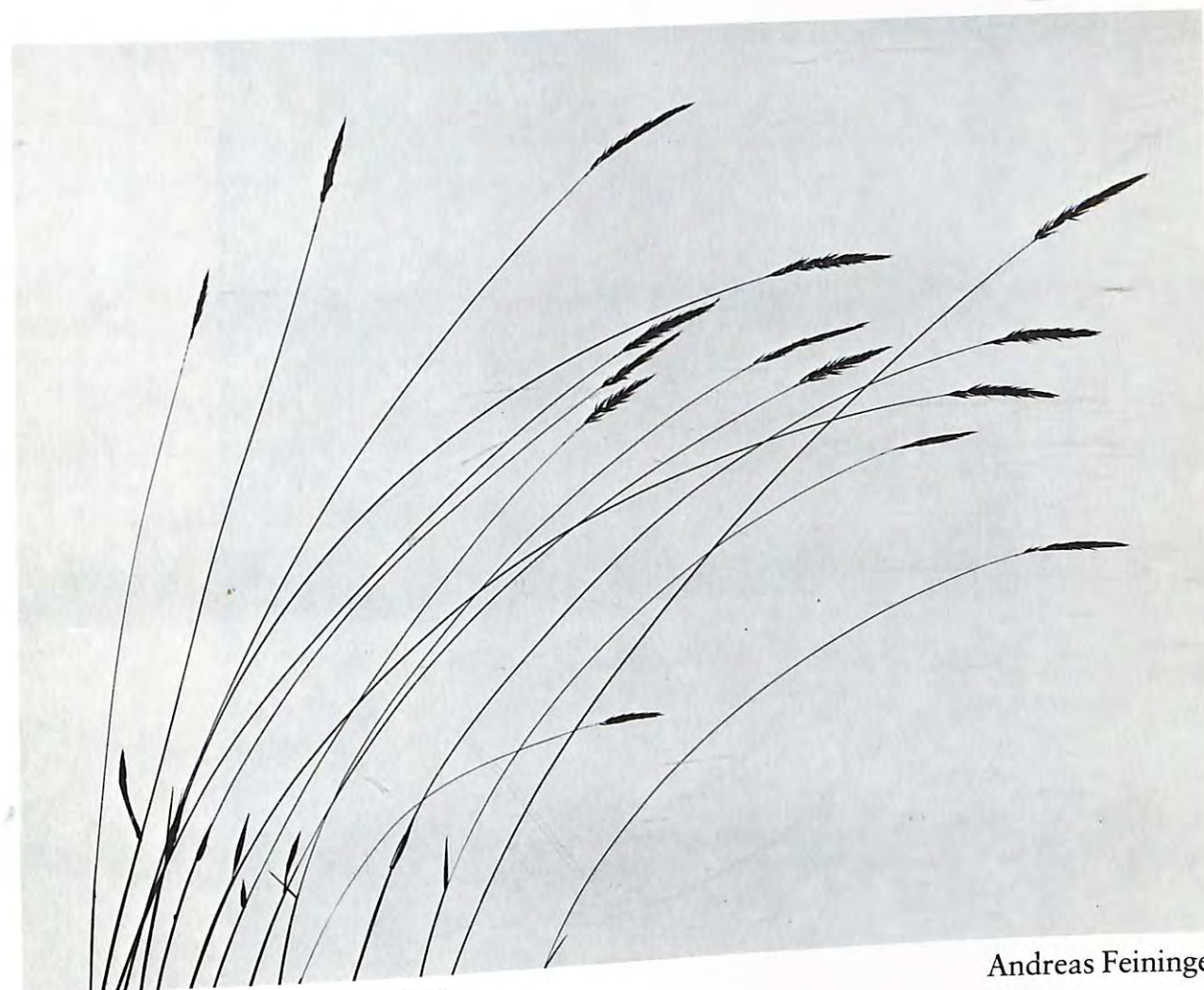
31 Philodendron, 1970
Both Courtesy Witkin Gallery

Irene Fay



32 Queen Anne's Lace, ca.1965
Hunt Institute Collection

Andreas Feininger



33 Grasses, Connecticut, 1976
Hunt Institute Collection

Andreas Feininger



34 Decaying leaf of White Oak,
ca. 1935

Andreas Feininger

Hunt Institute Collection



35 Tulip Tree, leaf buds in Spring, 1972

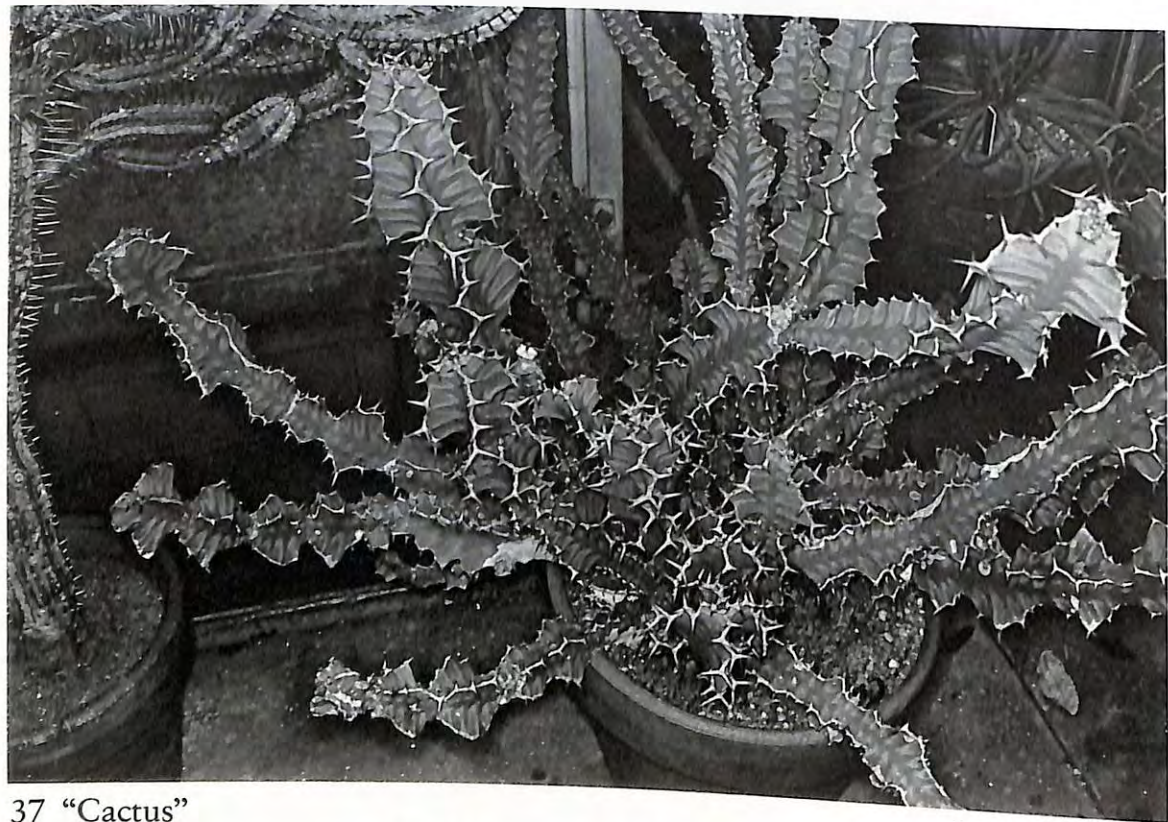
Andreas Feininger

Hunt Institute Collection



36 Hollyhocks

Lee Friedlander



37 "Cactus"

Lee Friedlander

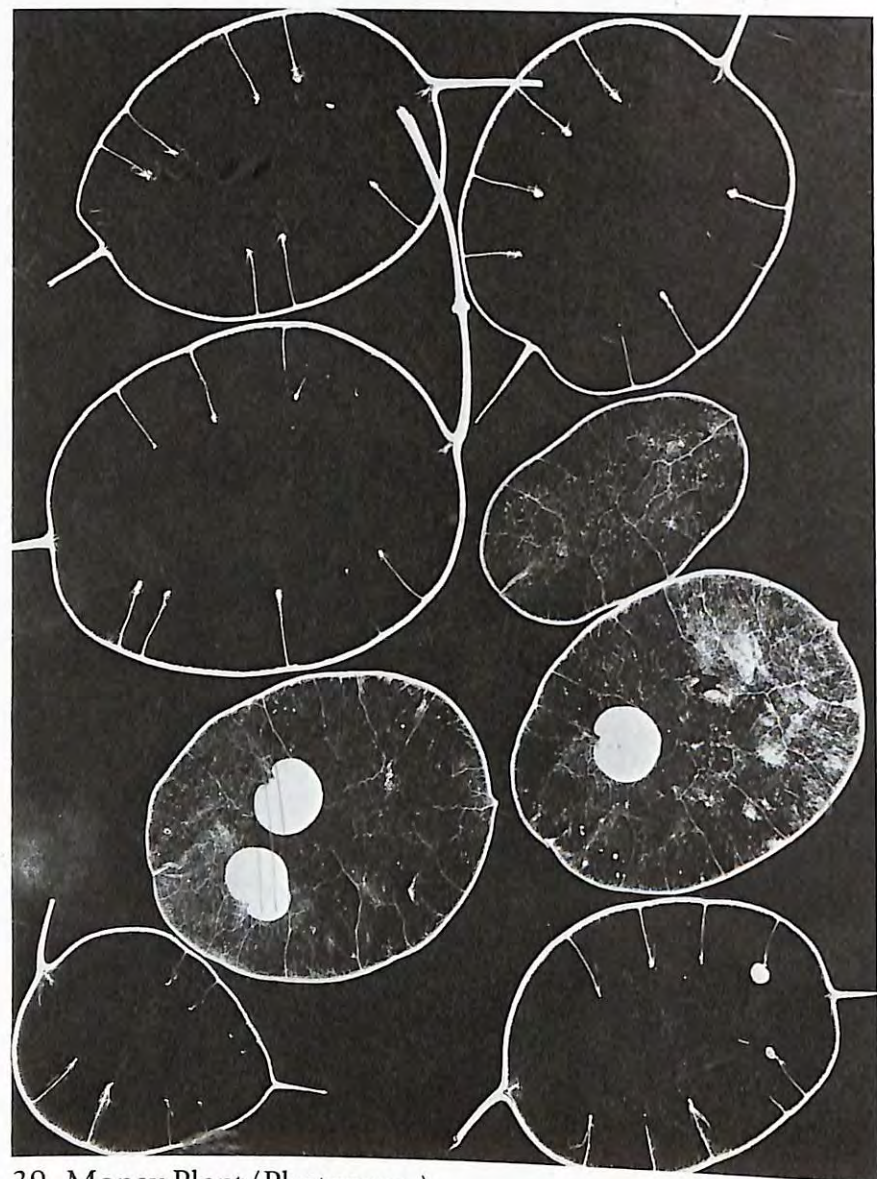
Both Courtesy Light Gallery



38 Tree trunk and foliage

Courtesy Museum of Art, Carnegie Institute

Alexandre Georges



39 Money Plant (Photogram)

Lent by Mr. Hare

Clyde Hare



40 Dandelion

Lent by Mr. Hare

Clyde Hare



a



b



c



d



e



42 Calla Lily, 1922

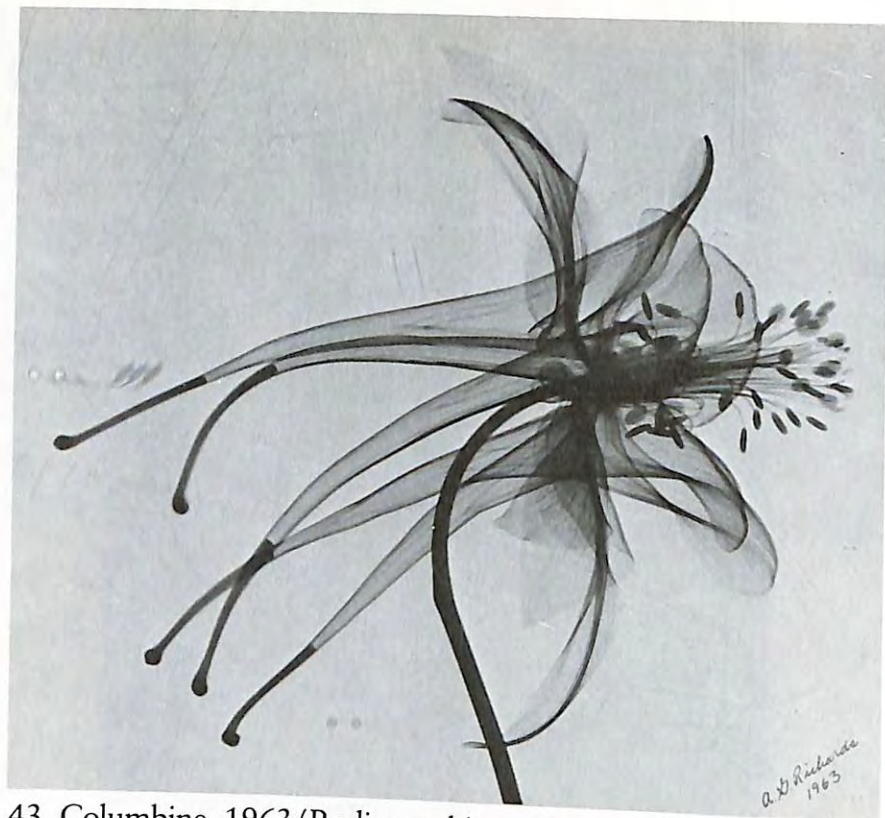
Paul Outerbridge

Courtesy Library of Congress

OPPOSITE

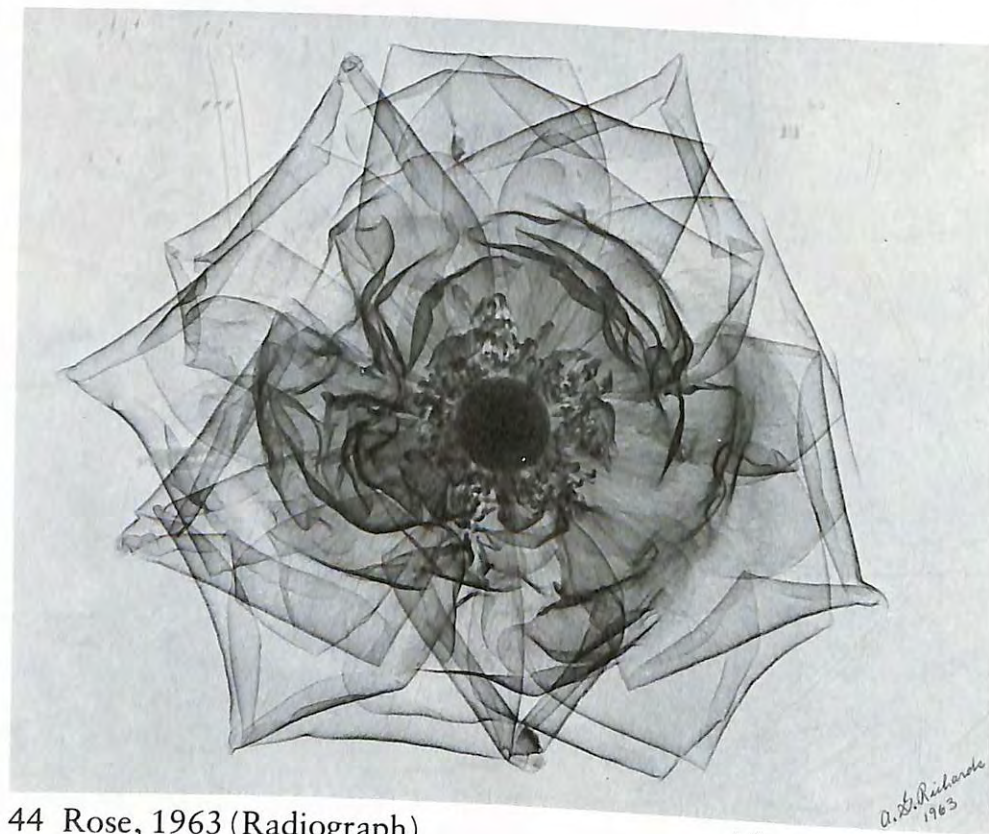
- 41 Scanning electron photomicrographs
(magnification range 840 to 6000x)
- a *Siphonochia americana*
 - b *Psilotrichum amplum*
 - c *Opuntia lindheimeri*
 - d *Plumbago europaea*
 - e *Goniolimon collinum*
 - f *Polygonum cyanandrium* (not illustrated)
 - g *Herniaria glabra* (not illustrated)
 - h *Gymnocarpos fruticosum* (not illustrated)
- Courtesy Smithsonian Institution

Joan W. Nowicke



43 Columbine, 1963 (Radiograph)

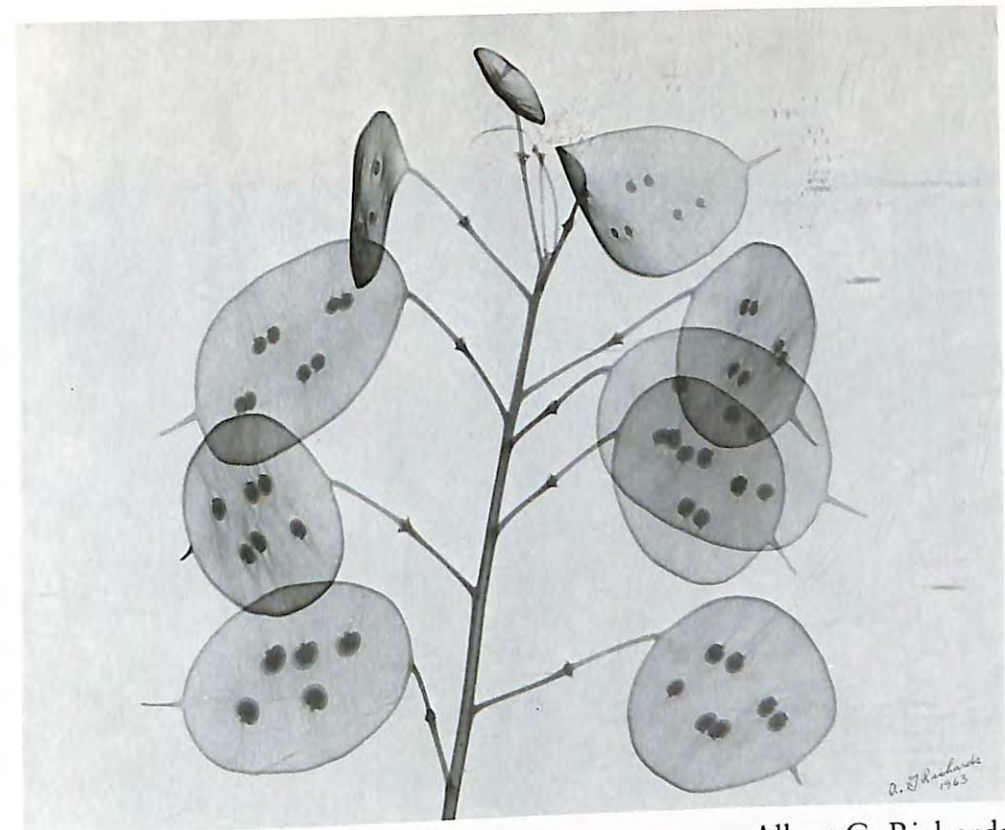
Albert G. Richards



44 Rose, 1963 (Radiograph)

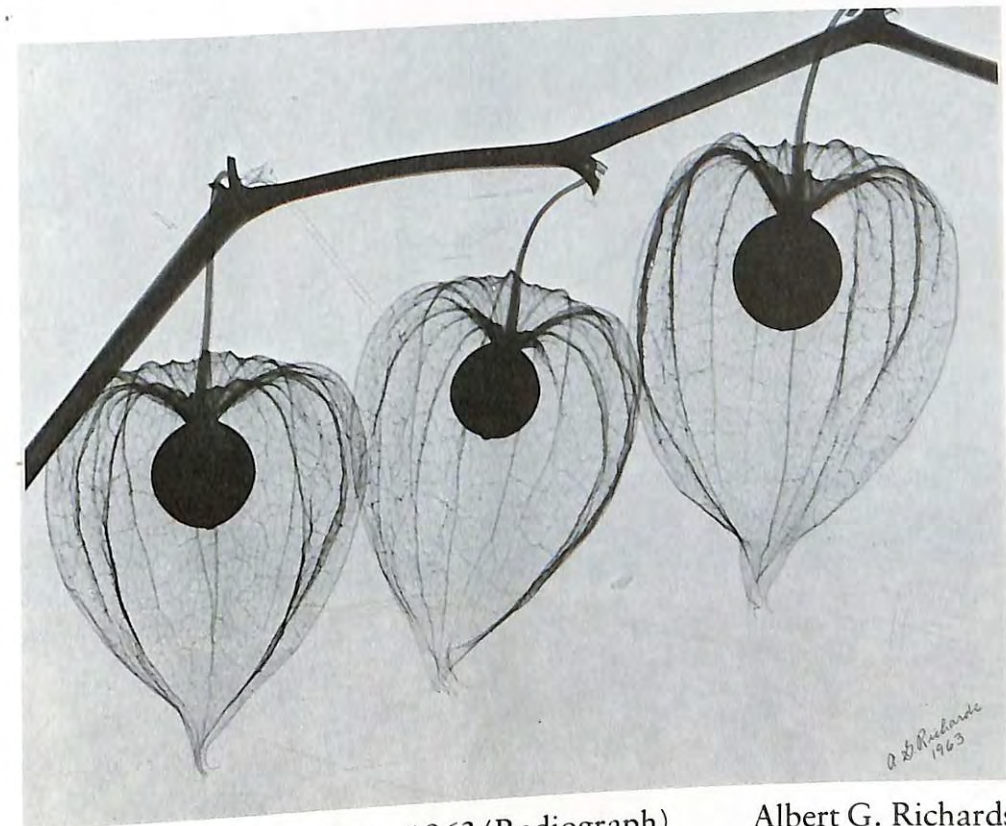
Albert G. Richards

Both Hunt Institute Collection



45 Money Plant, 1963 (Radiograph)

Albert G. Richards



46 Chinese-Lantern Plant, 1963 (Radiograph)

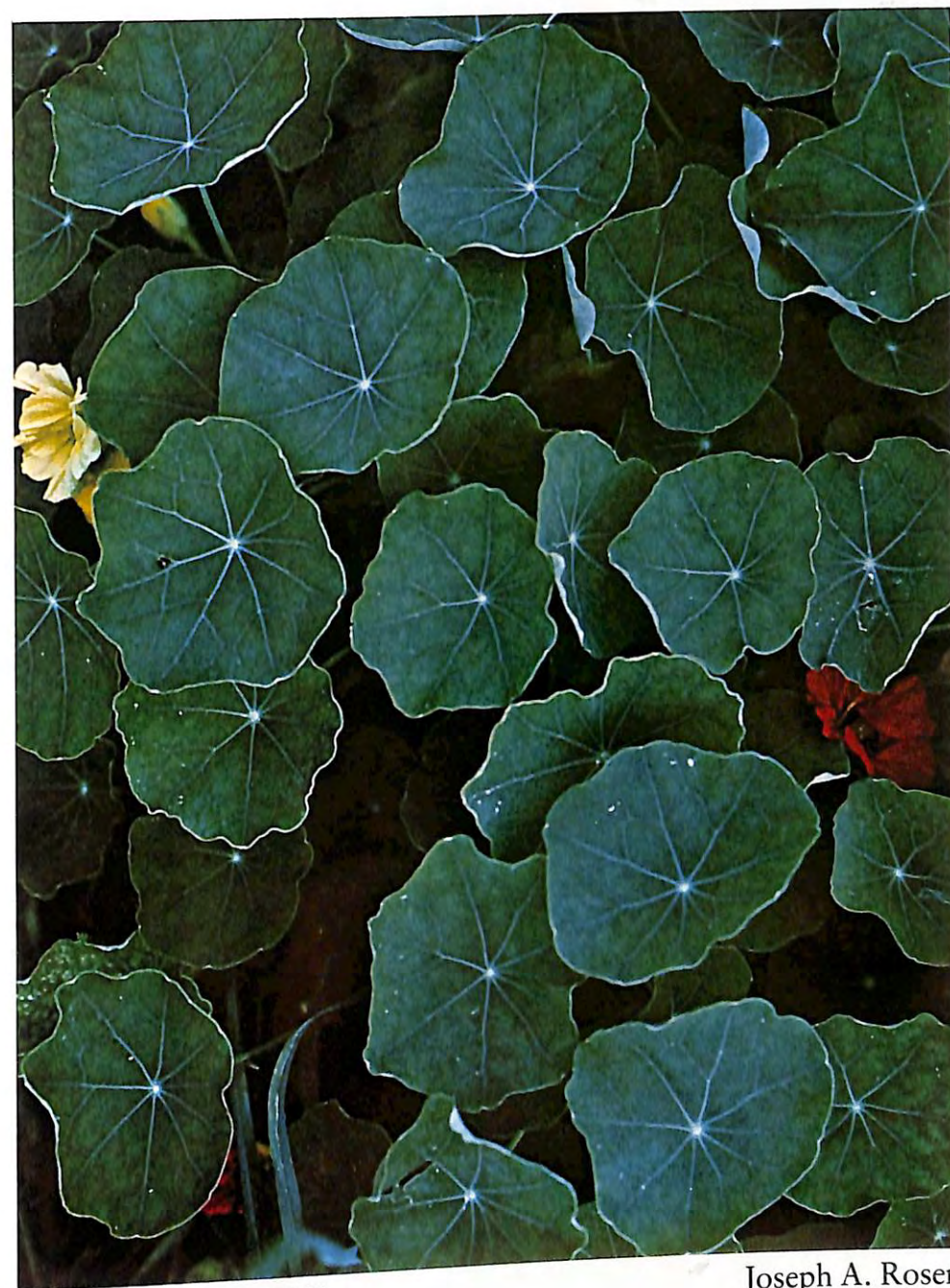
Albert G. Richards

Both Hunt Institute Collection



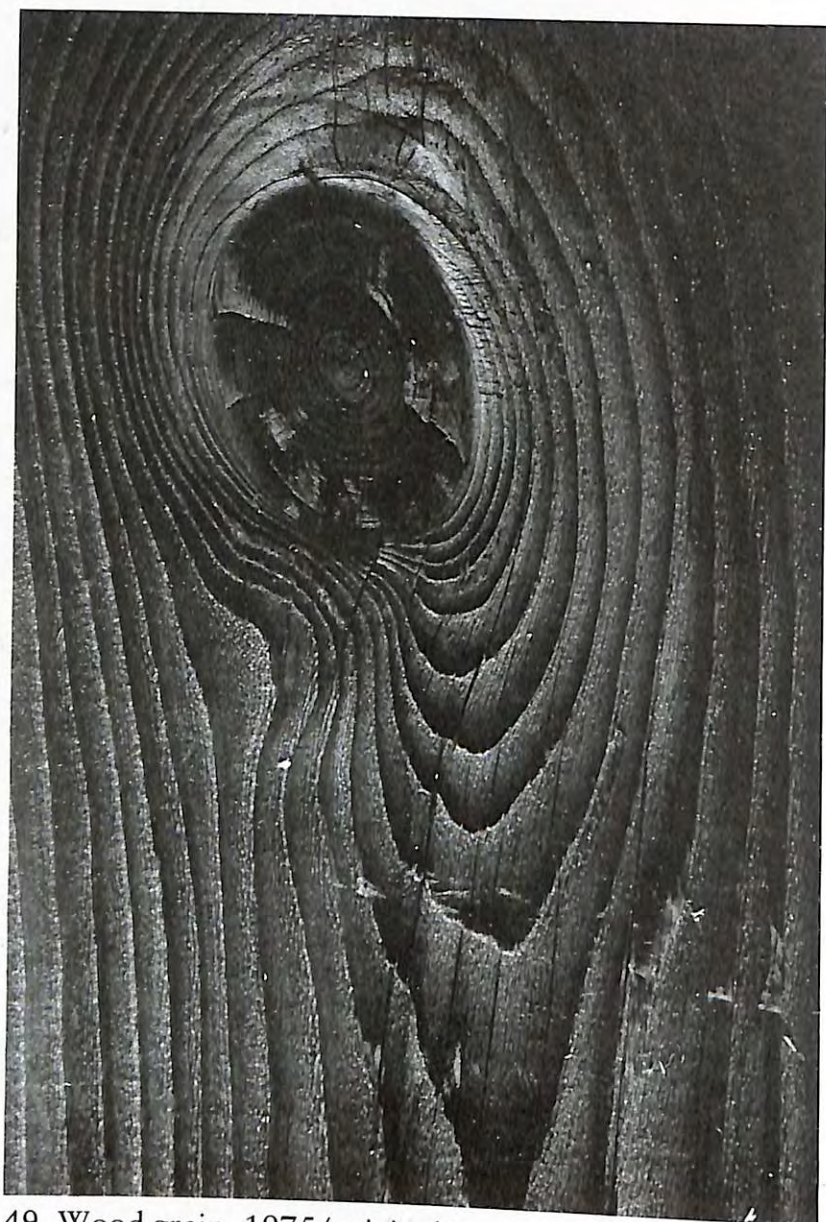
47 Easter Lily, 1963 (Radiograph)
Hunt Institute Collection

Albert G. Richards



48 Nasturtiums, 1978
Lent by Mr. Rosen

Joseph A. Rosen



49 Wood grain, 1975 (original in color) Joseph A. Rosen
Hunt Institute Collection



50 Bird-of-Paradise (Radiograph) Harold F. Sherwood
Hunt Institute Collection



51 Orchid (Radiograph)
Hunt Institute Collection

Harold F. Sherwood

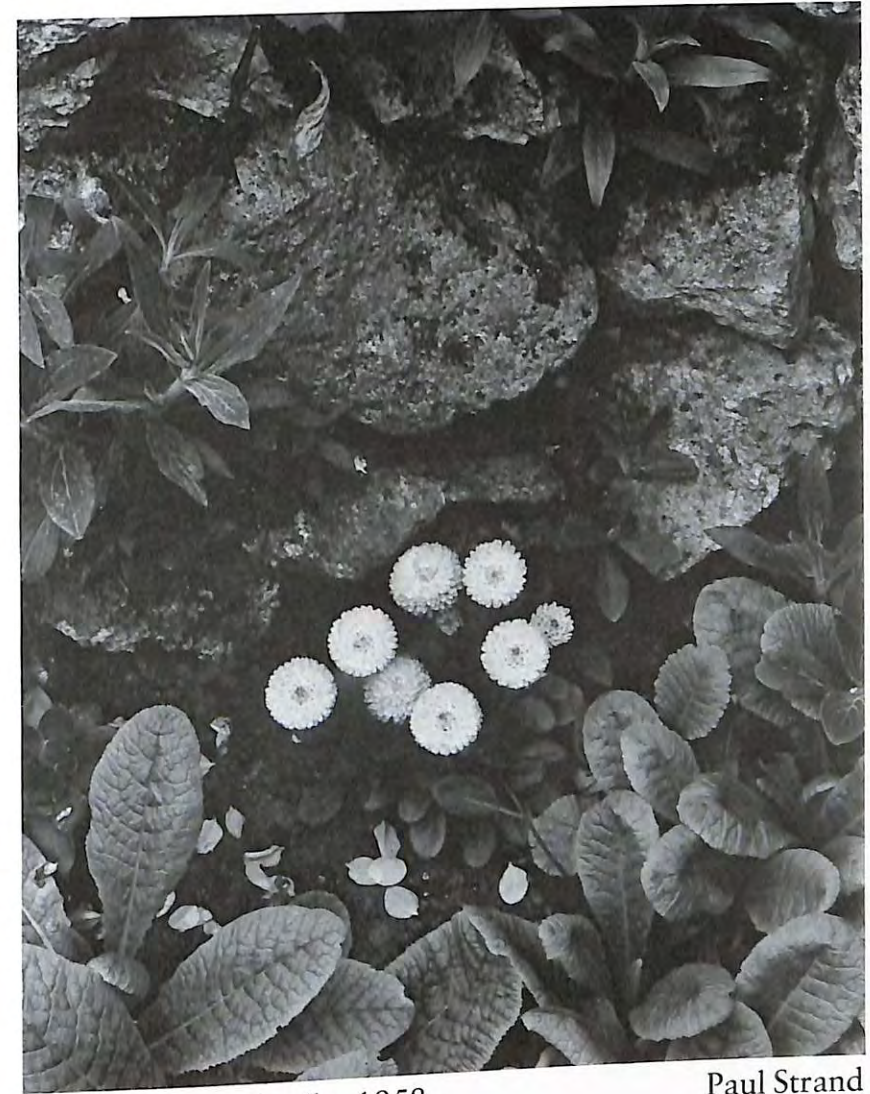


52 Lotus, Mt. Kisco, New York, 1915
Courtesy Library of Congress

Edward Steichen



53 Crocus and Primroses, 1957
 Paul Strand
Courtesy Estate of Paul Strand and Hazel Strand



54 The Happy Family, 1958
 Paul Strand
Courtesy Estate of Paul Strand and Hazel Strand



55 Apocalypse II, 1967

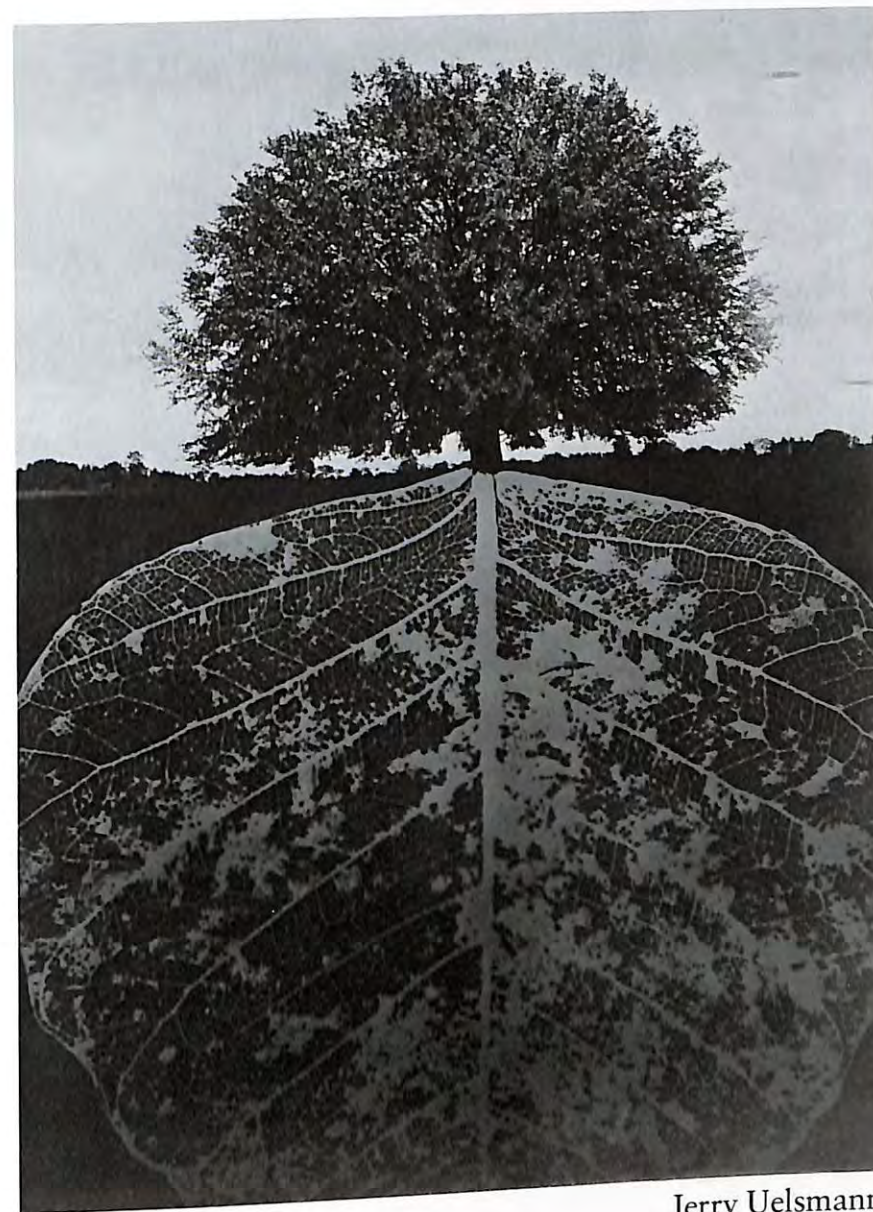
Jerry Uelsmann



56 Enigmatic Figure, 1959

Jerry Uelsmann

Both Courtesy Library of Congress



57 Untitled, 1964

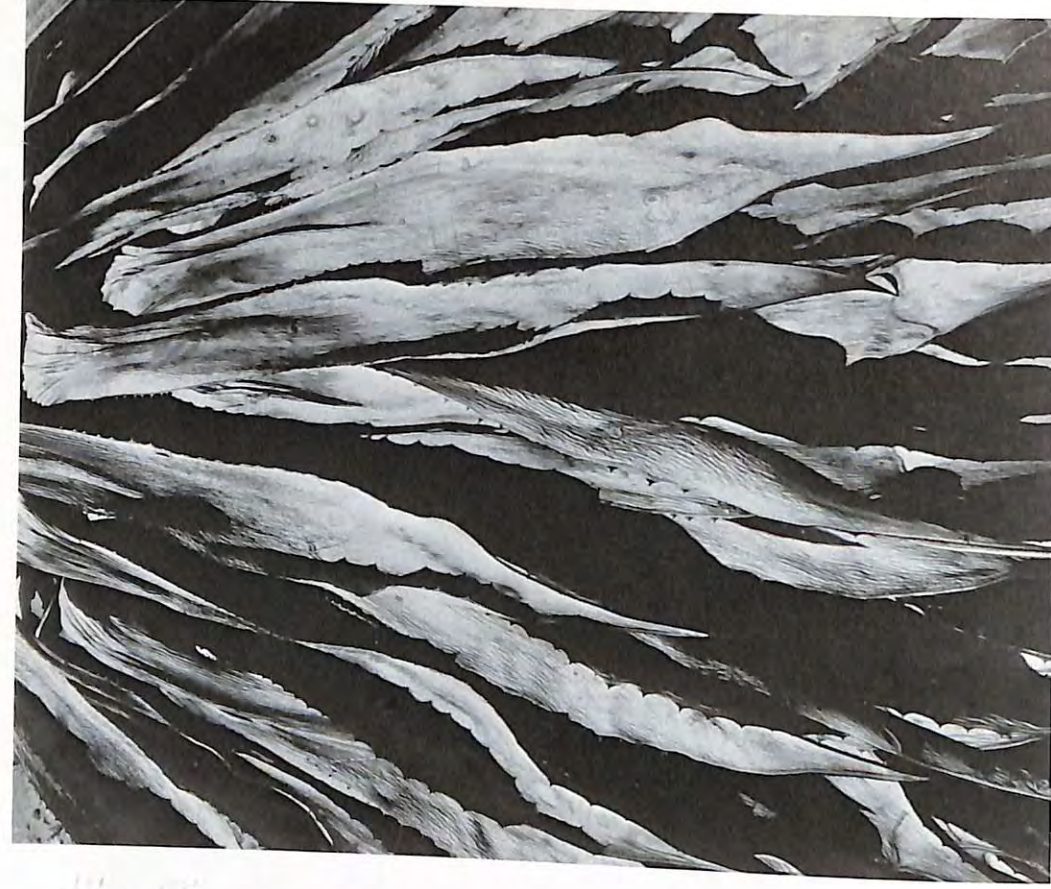
Courtesy Library of Congress

Jerry Uelsmann



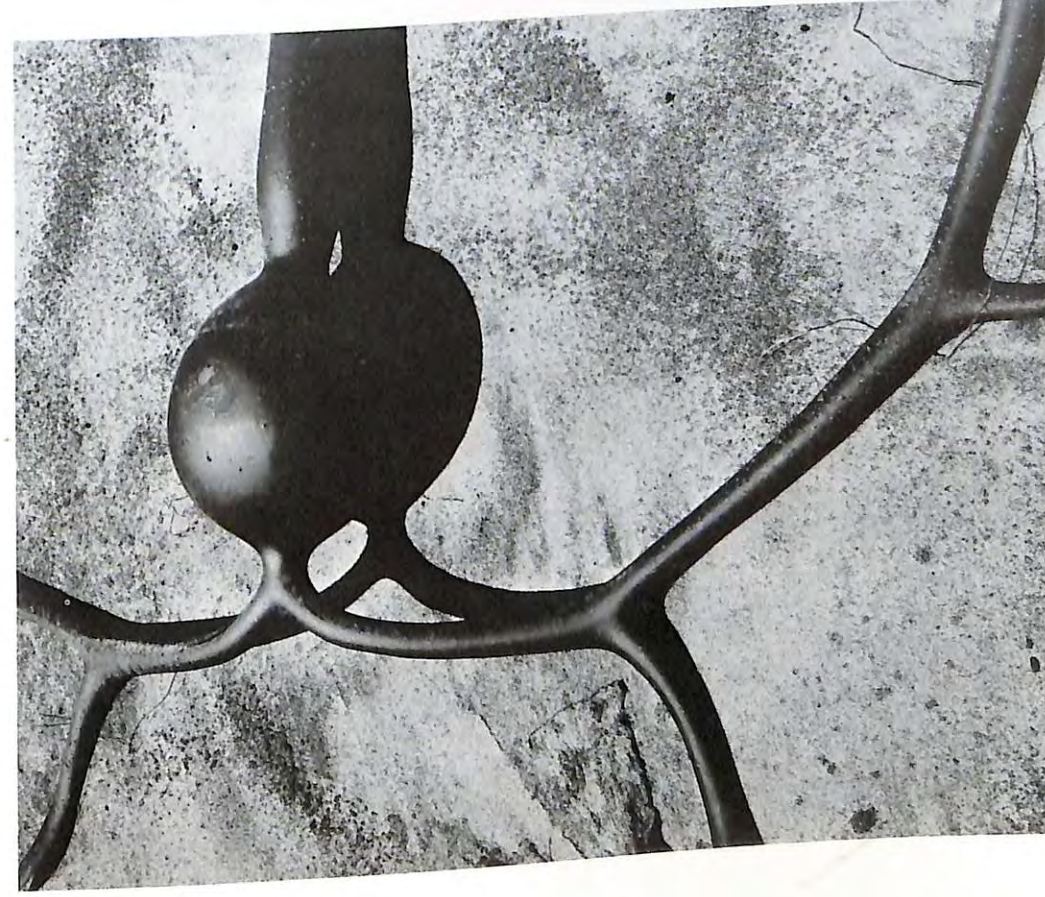
58 Agave, Baja California, 1967

Brett Weston



59 Agave, Baja California, 1964

Brett Weston

Courtesy Library of Congress

60 Brown alga, Baja California, 1967

Brett Weston



61 Cactus, Baja California, 1967

Brett Weston

Courtesy Library of Congress



62 Flaming Cypress root, Point Lobos, 1929
Courtesy Library of Congress

Edward Weston



63 Artichoke halved, 1930
Courtesy Witkin Gallery

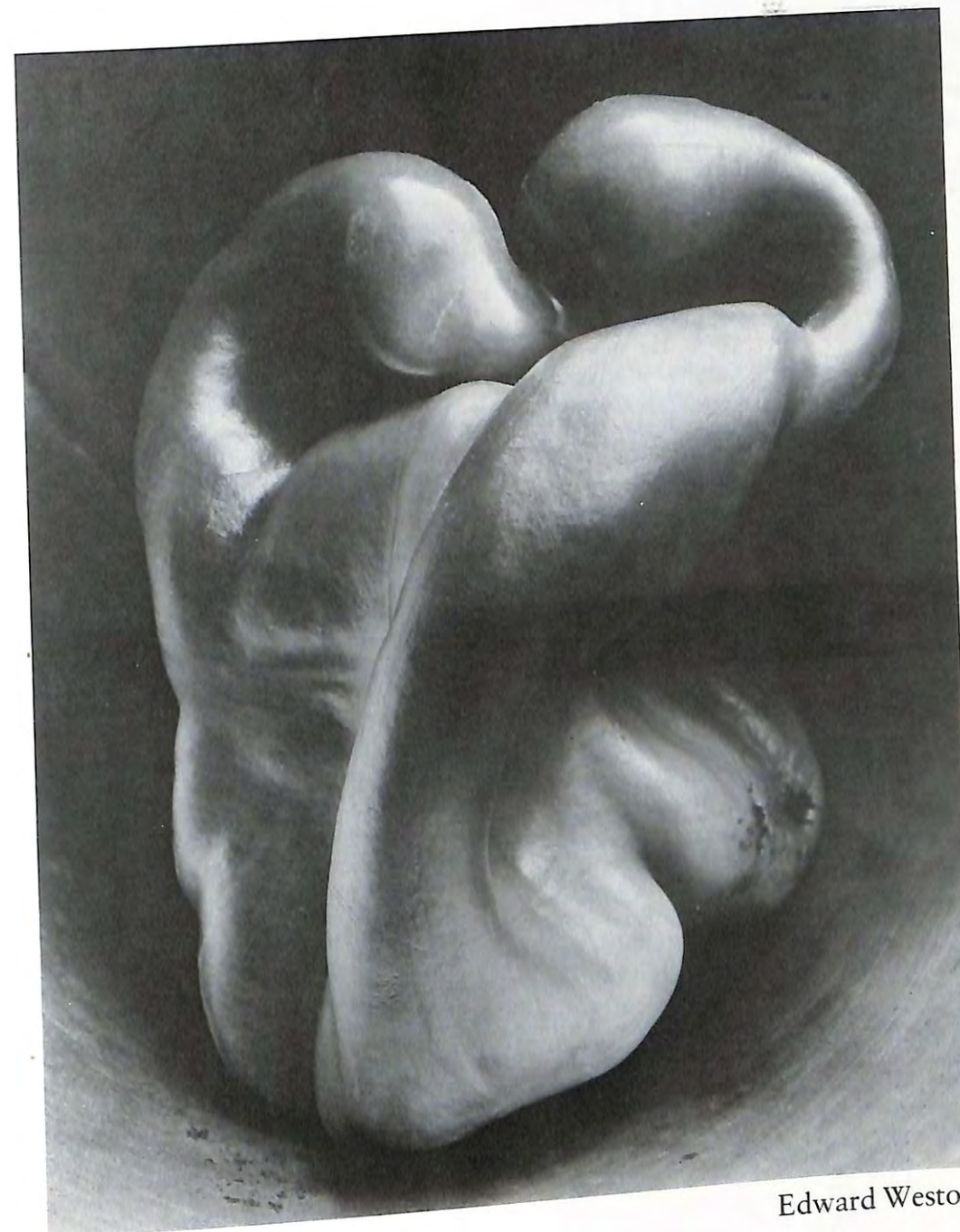
Edward Weston



64 Toadstool, 1932

Courtesy Museum of Art, Carnegie Institute

Edward Weston



65 Pepper

Courtesy Library of Congress

Edward Weston

The Photographers

Conservationist, mountaineer, lover of wilderness, ANSEL ADAMS (born 1902) is an outstanding interpreter of the natural scene. Impressed by the work of Paul Strand in 1930 and realizing the validity of the straight approach, he worked out a practical rationale of determining and precisely controlling exposure and development that eliminates guesswork, permits concentration on esthetic problems.

Adams was a founder member of Group f/64 in 1932, one of the Board of Directors of Sierra Club; he helped found the first department of photography as a fine art at the Museum of Modern Art, 1940, and founded the first department of photography at California School of Fine Arts, 1946. He has won awards too numerous to cite, has published manuals and an impressive list of books. As author, lecturer, teacher, conductor of workshops, above all as master in the portrayal of landscape, trees, roots, leaves and driftwood, Ansel Adams is probably the most influential of living photographers.

R. F. AHERN (early 20th century)

DAVID ASCHKENAS holds a degree in motion picture film studies (Penn State University, 1972), but has since concentrated on still photography. He is self-taught, works primarily with large format cameras. His work has received several awards. He has been a guest lecturer at Carnegie Library of Pittsburgh, and is an instructor of photography at the Pittsburgh Filmmakers, Inc.

OSCAR BAILEY has been Associate Professor of Photography, State University College at Buffalo. He is a founding member of The Society for Photographic Education, 1962 and received a NEA Photographers Fellowship Grant in 1976.

The German KARL BLOSSFELDT (1865-1932) studied sculpture, applied arts and music. In his travels in Southern Europe and North Africa in the 1890s he collected and photographed plants. On the faculty of the Royal Academy of Practical and Applied Arts in Berlin, he continued his travels and, in 1900, undertook the systematic photography of plants, an abiding preoccupation throughout his career. In his own words: "In every respect the plant is a totally aesthetic architectural structure . . . a rhythmic ornamental creation . . . like all of nature [it] has a form which represents a specific purpose and utility of its own." Though his

original negatives have disappeared, his life project is manifest in the two volumes of *Art Forms in Nature* (1928, 1932).

DENNIS BROKAW is a contemporary West Coast photographer and author of *The Pacific Shore: Meeting Place of Man and Nature*. Brokaw works in color and produces dye prints of his images. He concentrates on wilderness details.

HARRY CALLAHAN, self-taught, began photographing in 1938 and worked as a processor in a photo laboratory at General Motors in 1944-45. Influencing Callahan were the photographers Minor White, Alfred Stieglitz, and Moholy-Nagy. Callahan served as head of the departments of photography at both the Institute of Design in Chicago and the Rhode Island School of Design. In France he made close shots of grasses and wildflowers and has since experimented with multiple images.

HAROLD CORSINI has been a free-lance photo journalist and a war correspondent (Pacific Theatre); he worked on a Mellon Grant at the Pittsburgh Photographic Library, 1951-54, and ran a photo-illustration studio, 1954-74. Currently he teaches in the Design Department of Carnegie-Mellon University.

A woodshed darkroom and a correspondence course started IMOGEN CUNNINGHAM (1883-1976) on her photographic career at the turn of the century in Seattle where she opened a portrait studio in 1910. Her interest in plants dates from 1915. Moving from soft-form romantic-impressionist pictorialism to sharp-focus realism she became a member of the influential Group f/64, which included, among others, Edward Weston and Ansel Adams. She produced many notable portraits, but turned increasingly to plants and natural forms to which she imparted great sensuality.

Since the 1940s JEAN DIEUZAIDE has had a versatile career in photography, teaching, exhibiting and winning awards in France and internationally.

IRENE FAY worked in the studios of Hans Finsler and Gottard Schuh in Zurich, Switzerland before emigrating to the United States in 1948. She has photographed in New York state, the West Indies, and the moors and dales of England. She frequently lectures on and teaches photography.

ANDREAS FEININGER, son of the famous artist Lyonel, attended the Bauhaus in Germany, became an architect and worked with Le Corbusier, 1932-33. Having taught himself photo-technology basics, he gave up architecture, moved to New York (1939) and worked as a photo-journalist, as a full time staff photographer for *Life*, 1943-62. He is a scholarly photographer who has specialized in nature subjects, close-up and tele-photography. He has been the subject of numerous major exhibitions, has written extensively—manuals and a wide variety of articles and books: *The Complete Photographer*, 1965, *Forms of Nature and Life*, 1966, *Trees*, 1968, *Shells*, 1972, *Photographic Seeing*, 1973, *Roots of Art*, 1975, and many others.

Born in Washington state, LEE FRIEDLANDER studied at Art Center, Los Angeles and also with Edward Kaminski. He began photographing in 1948, particularly studies of the changing American scene, the city and its people.

For many years ALEXANDRE GEORGES did architectural photography. After working with Ansel Adams in the 1950s, he turned to nature subjects, and now supplies enlarged color prints to architectural firms all over the country. One-man shows of his nature photographs are widely circulated.

CLYDE HARE studied under Henry Holmes Smith, an associate of Moholy-Nagy at Indiana University in 1946. He became a photo-journalist in 1951 with regular credits in *Life*, *Time*, and *Fortune*. More recently his work has been published in *National Geographic*, *Business Week*, and publications of the U. S. Information Agency. He is active in advertising, public relations and industrial photography, design, exhibits, video work and lecturing. Nature photography is important in his work. He now teaches photography at Carnegie-Mellon University School of Architecture.

A plant systematist and palynologist, JOAN W. NOWICKE photographs pollen grains with the scanning electron microscope. As Curator of Botany at the Smithsonian Institution, she is chiefly interested in three Central American plant families—Phytolaccaceae, Apocynaceae, and Boraginaceae. She was educated at Washington University, St. Louis, and the University of Missouri, Columbia, was a Post-doctoral Fellow of the Missouri Botanical Garden, and later Assistant Professor of Biology at the University of Missouri, St. Louis.

PAUL OUTERBRIDGE (1896-1959) worked on stage design in 1916, then studied at the Clarence H. White School of Photography, the Art Students League, and with the sculptor Archipenko. He was a highly successful commercial color photographer who experimented with carbro color. He worked mostly with platinum paper, despite its scarcity. In 1940 he published *Photographing in Color*.

A roentgenologist and professor of dentistry, ALBERT G. RICHARDS is interested in radiographs (x-ray photographs) of flowers. He is author of "New Loveliness in Spring Flowers" in *National Geographic School Bulletin* and "Floral Radiography is My Hobby" in *The Michigan Botanist*.

JOSEPH A. ROSEN holds a B.A. in photography and related studies (Carnegie-Mellon University, 1973), is staff photographer at the Hunt Institute. He holds the same position at *Pittsburgher Magazine*, and teaches courses for the Art Department of Carnegie-Mellon University. Free-lance work includes projects for the Pittsburgh History and Landmarks Foundation.

As Research Associate with Eastman Kodak Company, HAROLD FRANK SHERWOOD works in the field of low-voltage x-ray radiography. His floral radiographs have been published in the "The Radiography of Flowers" in *Medical Radiography and Photography*.

EDWARD JEAN STEICHEN (1879-1973) came under the influence of Alfred Stieglitz in 1902 and helped him establish the Photo-Secession Galleries. A prominent figure in the world of photography throughout his long career, he was chief photographer for Condé Nast Publications, 1923-38, director of American Naval Photographic Institute, 1945-46, and Director of Photography of the Museum of Modern Art, 1947-62. He did serious fashion photography, close-up still life studies, and memorable portraits—Rodin, George Bernard Shaw, J. P. Morgan, etc. He prepared the widely shown exhibition 'Family of Man' (Abraham Lincoln's phrase), 1952-55 and organized over 50 other shows.

PAUL STRAND (1890-1976) who had studied under Lewis Hine in 1909, brought his prints for criticism to Alfred Stieglitz who was so impressed that he gave the young photographer a one-man show at the now legendary '291' gallery in 1916. Praised as "brutally direct", his photographs—of New York scenes, people, abstract patterns in nature, and commonplace objects—

are extraordinarily precise and strongly influenced many of his contemporaries.

In 1945, New York's Museum of Modern Art devoted its first one-man photography exhibition to Strand's work. He produced innovative photographic books—*Time in New England*, *La France de Profil*, *Living Egypt*, *Ghana: An African Portrait*—and made several classic motion picture film documentaries—*The Wave* (1934), *The Plow that Broke the Plains* (1935), *The Heart of Spain* (1940), *Native Land* (1942).

Note: The photographs exhibited are from *The Garden*, a portfolio of six original photographs (copyrighted by Paul Strand). A limited edition of 50 sets was published by Michael Hoffman as agent for Paul Strand, at Elm Street, Millerton, New York 12546.

JERRY UELSMANN received his Master of Fine Arts degree in 1960 and began teaching photography at the University of Florida. His photographs, generally of nature and landscapes, are photomontages, results of experiments in multiple-print techniques. Prints are made by exposing them sequentially to different negatives, or by exposing them through sandwiched negatives, or through other prints used as negatives. The result is often double reflections or reflections of a surprising nature.

BRETT WESTON (born 1911) worked closely with his father Edward Weston from the age of 12, accompanying him on photographic expeditions and joining him in portrait studio projects. When Edward Weston was stricken with Parkinson's Disease in 1948, Brett devoted several years to helping put out *50th-Anniversary Portfolio*, 1955, and *Archive* (eight prints each from some 800 negatives), 1955-56. Though Carmel, California remains his home, he has travelled widely photographing landscape, structures, and close-up details, particularly of nature: rock forms, sand shapes and textures, clouds, pine trees. Brett Weston's prints

are marked by a strongly personal idiom, but he is like his father in his adherence to the integrity of his medium, his dependence solely on the pure photographic process to achieve the sharp image, clarity and perfection of tone; and he is like his father, too, in creating a profound impression beyond verbal description.

EDWARD WESTON (1886-1958) was born in Illinois, in 1906 came to California, which remained his base throughout his distinguished career. Stimulated by the rugged country around Point Lobos, Weston, individualist and self-disciplinarian, worked in isolation, mastering his craft. As a young man, too poor to afford waste, he made himself the greatest perfectionist of his day.

One of several photographers whose work was given new direction by the influence of Alfred Stieglitz and Paul Strand in the 1920s, Weston renounced soft-form work in favor of pin-sharp rendering; he was one of the founders of the progressive Group f/64 whose esthetic was based on the straight approach in reaction to pictorialism. After experimenting with semi-abstractness, Weston turned toward identification with nature and realism. In his *Daybooks* which expounds his philosophy and recounts personal and professional struggles he writes: "The camera must be used for recording life, for rendering the very substance and quintessence of the thing itself . . . I shall let no chance pass to record interesting abstractions, but I feel definite in my belief that the approach to photography is through realism." In another passage: "I want the greater mystery of things revealed more clearly than the eyes see . . . than the layman—the casual observer notes." Through methods rigidly simplified, Weston's 'revealments'—of landscapes, trees, rocks, nudes, a shell, a cabbage, a pepper—brilliantly realize his aim of "making the commonplace unusual".

