

IRRESISTIBLE ATTRACTION—Something as climbable as a triceratops is pretty hard for a youngster to resist. Uncle Beazley, the full-size dinosaur made for the "Enormous Egg" TV show, has stoically submitted to hordes of children dangling from his horns and sliding down his sloping back since he went on display in front of MNH.

Institution to Begin 'Storing' All Collections in One Room

The Smithsonian will soon begin storing its 60 million items in one room on the third floor of the Arts and Industries Building.

It will be easier than it sounds, because the objects are only going into the memory of a computer the institution has ordered. The new mechanical mind in A&I will handle all administrative processing and begin cataloging the collections.

According to Director of Information Systems Nicholas J. Suszynski Jr., it could take 75 people working for a century to feed all the data on the Smithsonian collections into the computer. But for a start approximately 50,000 biological and geological specimens will be computerized.

A central storage place for biological

and geological information is considered so worthwhile that the Office of Education in HEW has agreed to help pay for this operation. It is expected that scholars from across the country will want to use the computer's "knowledge" of these specimens.

The new machine, a Honeywell 1200, replaces an older and smaller system now in use. Suszynski says it will be linked to the computer at the Astrophysical Observatory in Cambridge, Mass., expanding the capabilities of both machines.

Future plans also include communications terminals in most museum buildings for easy access to the computer.

Besides cataloguing, the electronic mastermind will take care of payroll lists and employee rosters. Suszynski says it (Continued on page 4)

THE SMITHSONIAN

Smithsonian Institution, Washington, D.C.

No. 25, September, 1967

Community Museum Opens September 15 in Anacostia

The Anacostia Neighborhood Museum at 2405 Nichols Avenue, S.E., is scheduled to open on Friday evening, September 15.

The product of a unique relationship between citizens of southeast Washington and SI, the community museum will open with six exhibits, all designed for visitor

Hopper's Death Changes Nature Of Bienal Entry

The death of Edward Hopper, principal artist in the United States entry at the IX Sao Paulo Bienal in Brazil, changes the nature of the NCFA-sponsored presentation at the show opening September 22.

"Because of the death of Edward Hopper, what was to have been the first international presentation of an American master has now become a memorial exhibition. This should give added attention to the American presentation, and emphasize even more sharply the incisive image of the American environment offered by the 21 other artists," says William C. Seitz, who selected the U.S. entry. Seitz is director of the Rose Art Museum and Poses Institute of Fine Arts at Brandeis University.

NCFA's International Art Program, directed by Miss Lois Bingham, is responsible for U.S. participation in such international art festivals as the Sao Paulo Bienal. More than 65 countries will also participate.

The U.S. entry, in addition to the featured Hopper, includes Allan D'Arcangelo, Llyn Foulkes, James Gill, Sante Graziani, Paul Harris, Robert Indiana, Jasper Johns, Gerald Laing, and Roy Lichtenstein.

Also: Richard Lindner, Malcolm Morley, Lowell Nesbitt, Claes Oldenburg, Joe Raffaele, Robert Rauschenberg, James Rosenquist, Edward Ruscha, George Segal, Wayne Thiebaud, Andy Warhol, and Tom Wesselmann. participation: a Mercury space capsule, a walkthrough reproduction of an 1890 Anacostia store, a little theater with closed-circuit television, shoebox collections on many natural science subjects, skeletons that can be disassembled and assembled, and a small zoo.

The indoor zoo will feature four squirrel monkeys, two raccoons, a doublehead yellow Amazon parrot, Java and Zebra finches, bullsnake, and a fresh water aquarium that will contain frogs, tadpoles, turtles, and catfish.

Plans call for introduction of new exhibits in a rotation process every few months, according to Jerry Shelton of the MHT design section. Shelton has worked closely with local residents in setting up the initial exhibits.

Secretary S. Dillon Ripley, who introduced the concept of community museums last year, said "I look upon development of the Anacostia Neighborhood Museum as an important event in the areas of both public education and social progress—perhaps not wholly unlike the step forward marked by establishment of the first branch public libraries many years ago.

"For the Smithsonian, it represents a reaching out to a local community in a manner most fitting for a great educational institution. For their part, leaders of the Anacostia community are devoting themselves to development of a neighborhood institution that can symbolize their hopes and aspirations even as it provides a local window on the great collections of the Smithsonian."

An active advisory committee of Anacostia residents has worked with the SI in establishing the museum and will operate it with Smithsonian support and cooperation.

Private foundations—The Carnegie Corporation of New York, the Eugene and Agnes E. Meyer Foundation of Washington, and the Anne S. Richardson Fund of Connecticut—have provided a substantial portion of the funds required.

Director of the new museum is 30year-old John R. Kinard. Kinard has engaged in a wide variety of programs for young people in Africa and the United (Continued on page 4)

N.D. Attic Yields SI Whopping 171/2 Feet of Beard

By Jim Klobuchar

Physical anthropologists of the Smithsonian, a group of scholars seldom awed, admitted they are astonished by their latest find—a 17½-foot beard rescued from a North Dakota attic chest.

(Following authentication by an expert, Dr. Lucile St. Hoyme of MNH said "the beard not only is an artifact but an all-time record.")

For 40 years it has reposed, balled up and forgotten in the clutter of a farm attic near Barney, N.D., where it was last seen publicly coiled from the chin of the late Hans Langseth, its founder.

For nearly five decades, Langseth cultured his remarkable growth, protecting it against the ravages of North Dakota winters, occasional Indian Wars, and inquisitive children.

Ultimately the beard became so long it was almost good enough for a first down. Envious neighbors maintained that Langseth was the only farmer in the territory who could get clipped in two counties at the same time on his way to market.

He never submitted to barbering, however, although at the time he toured briefly with Ringling Bros. Circus he contended a full combing cost him \$50. Eventually, the beard acquired a character of its own, tumbling down Langseth's chest and beyond his knees in variegated hues. It had a handsome chestnut cast near its terminus, various shades of browns in midcareer, and distinguished whites near his chin.

On infrequent occasions, Langseth would fling it over his shoulder in a pardonable and rather rakish display to which the truly gifted are entitled.

Not the least of his qualities was his competitiveness. Once, reading of an alleged 12-foot record beard in a St. Paul, Minnesota newspaper, he took a train to the Twin Cities solely for the purpose of challenging the claim.

But the beard stopped, never to flow again, when Hans Langseth died in 1927. The beard was removed and given to a son, Peter, for safe-keeping. It was placed in a chest and by and large forgotten until Peter Langseth and his son, Russell, decided to inspect it a few months ago out of curiosity.

"It was amazingly well preserved," young Langseth said, "and I entered into a correspondence with the Smithsonian people about it."

Replied J. Lawrence Angel of the Institution's division of physical anthropology: "I think that the Smithsonian is a proper place to exhibit a record-breaking growth of hair, which has scientific interest as well as being an extraordinary achievement."

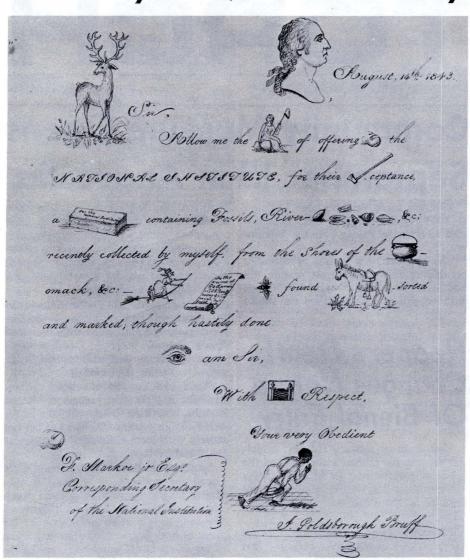
Added Dr. St. Hoyme: 'One can only admire the grower's tenacity, to say nothing of the agility needed to avoid stepping on it. We will go through the routine steps of having the authenticity of the beard checked. (It now has been.) Years ago we were given a growth taken from a Crow Wing chief who, curiously, was named Long Hair. It measured about 12 feet in length but was found to contain hair that did not naturally belong there."

Mr. Klobuchar's article is reprinted in part from the MINNEAPOLIS STAR.



The hairdresser isn't the only one who knows for sure in the case of this 17½-foot beard being held by physical anthropologists Lucile St. Hoyme, J. Lawrence Angel, and T. Dale Stewart. The scientists had the record growth checked by the FBI hair laboratory to confirm its authenticity. Hairiness is a characteristic of the white race, Dr. Angel points out, and this specimen will probably be displayed in the Physical Anthropology Hall. It is "an accumulation of beard hairs" with probably no one strand extending the entire length, and is not, Dr. Angel emphasizes, a freak.

Ordinary Gift, Rare Delivery



By Sam Suratt

The National Institute for the Promotion of Science, a predecessor of the Smithsonian, received many gifts of specimens from amateur naturalists, but none so charmingly donated as the box of fossils and shells from J. Goldsborough Bruff, in August of 1843. Mr. Bruff became a resident member of the National Institute in 1840 and gave a number of things to their museum, which was housed at the Patent Office. This museum was taken over by the Smithsonian in the 1860's and all the specimens and records, including Mr. Bruff's artistic rebus, became part of its collections.

J. Goldsborough Bruff was a graduate of West Point, but found the life of an

artist more appealing than the Army. With the exception of a trip to California during the gold rush of 1849, Bruff worked in Washington as a draughtsman, while he tried to gain recognition as an artist. In 1859 the Washington Art Association showed some of his work. He later became an employee of the U.S. Treasury and designed various medals, one commemorating the laying of the Atlantic Cable.

Another example of Bruff's artistry should also be in the Smithsonian. In 1844 he gave the National Institute an oyster shell, in which he had painted "a representation of Neptune in his car, drawn by dolphins." Perhaps some day Neptune will surface from the ocean of 60 million objects.

Dr. Talbot Assists Life Magazine At Indonesian Nature Reserve

Dr. Lee Talbot, ecology and international conservation, set the pace for August-September Smithsonian travelers.

Dr. Talbot spent last month in Indonesia, where he helped *Life* Magazine with a nature study at the Java Nature Reserve of Udjung Kulon. The last native Javan rhinos are there, only about 20-40 of them. While there Dr. Talbot also surveyed the animals in the reserve to compare them with a previous census and set up International Biology Program research plans with Indonesian scientists.

Dr. Donald F. Squires, deputy director of MNH, is in Australia and New Zealand until September 8, conducting research on tertiary environments of the Antarctic and related regions . . . Also in the eastern part of the world are Ernani G. Menez, SOSC, collecting marine specimens in the Philippines until October, and Botany's Thomas R. Soderstrom, visiting field research stations and discussing cooperative research programs in Japan, Indonesia, Thailand, and India, as well as England and France. . . . Henry E. Setzer, mammals, is on a collecting trip in Africa, gathering mammals and associated ectoparasites in Kenya, Ghana, Togo, Dahomey and South Africa. He will return in December. . . . Coming back sooner is Elvira Clain-Stefanelli, numismatics, due to return September 7 after professional meetings in Copenhagen and research in Oslo and

SMITHSONIAN TORCH

Published monthly for Smithsonian Institution personnel by the Office of Public Affairs. Submit copy to TORCH, Room 131, SI Building. London museums.... Richard H. Benson, invertebrate paleontology, will leave for London on the ninth, to attend a symposium at Cambridge and study the ostracod collection at the British Museum... Physical anthropologist J. Lawrence

Angel will leave the same day for Greece and Turkey, to study the skeletons of the early farming populations, . . . On nearby Cyprus, John H. Hubbard, birds, is conducting a survey of Palearctic migrant birds. He will return in December.

NASM Offers 'Lunch box' Talks

"Bring your lunch and spend an hour in food for thought," invites the National Air and Space Museum.

NASM's Dick Preston and Ernest Robischon have organized a series of weekly lunchbox seminars open to all interested SI staffers. Informal talks on a variety of subjects are given each Wednesday from noon to 1 p.m. on the second floor of the A&I Building.

Speakers for September include William Osmun, Information Services, Air Transport Association, speaking on "Aircraft Collision Avoidance" September 6; Dr. James B. Edson, Research and Engineering, U.S. Post Office, "Mapping of Mars and the Role of Lowell Observatory," September 13; Ernst Cohn, Nuclear Systems and Space Power Division, NASA, "Aeronautics in 1870," September 20; and Col. Floyd J. Sweet, Office of Defense, NASA, "Engineless Flight," September 27.

-ABOUT SI PEOPLE-

Paul Garber Will Retire After 47-Year SI Career

Paul A. Garber, senior curator and historian of the National Air and Space Museum, has been with the Smithsonian 26 years longer than NASM itself. The world-famous aviation historian will retire in December after 47 years at the Institution.

Garber has been witness to the acquisition of almost every important item in the collections. When he joined the staff, four Langley aircraft, a "rather incorrectly made copy" of Stringfellow's triplane, a Lilienthal glider, and the Wrights' military airplane of 1909 were the extent of the air museum's exhibits.



MNH SCIENTISTS GET HIGH AWARD

Museum of Natural History anthropologists Betty J. Meggers and Clifford Evans have received the Government of Ecuador's highest award, "The National Order of Merit." Drs. Meggers and Evans, the first American scientists to be so honored, were cited for their "inestimable contributions in making known the scientific value of Ecuador." While tracing Ecuadorian pre-history, the husbandwife team also uncovered evidence that Japanese fishermen landed in the New World as early as 3,000 B.C. or before.

"As a result," Ambassador Larrea said, "we are provided with a key to unlock the secret of the Origin of Man in America, and for Ecuador this has enormous significance because it indicates that culture moved from south to north and not the reverse, as had been believed and maintained."

TERMITE DAMAGE DOUBLES, SAYS SNYDER

The chances that termites are giving your house the "munch-over" have more than doubled within the past 10 years, according to **Dr. Thomas E. Snyder** of MNH. Dr. Snyder says termite damage to buildings and homes in the U.S. has increased to \$250,000,000 annually as compared to only \$100,000,000 just ten years ago.

The 82-year-old entomologist calls termites "social cockroaches" because, unlike their older cousins (roaches), termites display an elaborate society—the oldest of any civilization, the most complex, and the most intelligent. Nevertheless they are still pests.

PETERSON LEADS SHIPWRECK SEARCH

Mendel Peterson, chairman of MHT's Department of Armed Forces History and an accomplished skindiver, is leading an SI team in a comprehensive underwater survey of the Bermuda reefs and nearby waters to locate historic shipwrecks.

Underwater findings in later stages of the expedition, just begun late last month, will be exhibited in the newly opened Hall of Underwater Exploration in MHT.

SENIOR ZOOLOGIST AFTER MARINE LIFE

While Mendel Peterson is in Bermuda hunting shipwreck sites, SI's senior zoologist Harald A. Rehder is leading an expedition team collecting specimens of the marine life of French Polynesia. One of the world's foremost experts on Southeastern Pacific marine life, Dr. Rehder is collecting mollusks, crabs, starfish, and small fish. These specimens will be added to MNH's marine life collection, already one of the largest in the world.



WHIPPLE TO OPEN ASSOCIATES SERIES

Dr. Fred L. Whipple, Director of SAO, will be the first featured speaker in the Smithsonian Associates fall lecture series. Dr. Whipple will speak on "The Moon and Planets: Today's Frontiers." The lecture will be given at 8 p.m., September 19, in the MNH auditorium.

VISITING SCHOLAR HONORED

Dr. Roberto Donoso Barros, a visiting scholar here, has won Chile's most important literary prize for his recently published book, **Reptiles of Chile.** Dr. Barros and **Dr. James A. Peters**, curator of the Division of Reptiles in MNH, are collaborating on a neotropical squamata catalog, which will cover lizards and snakes of Central and South America.

"DIG" SUBSCRIPTIONS OFFERED

SI anthropologist Waldo R. Wedel's "dig" in Kansas drew so much attention that the Lyons Daily News offered a special subscription rate for its duration. In an 8 x 9 inch ad, the News declared that "One of Rice County's most interesting continuing stories is that of the Smithsonian Institution's archeological dig, 10 miles northeast of Lyons. . . . Perhaps you know someone who is not subscribing to the News, but would be interested in reading this continuing story. Several persons from various towns in Kansas have already taken out subscriptions to the News for this very reason." So far, no word from Dr. Wedel on how circulation has picked up.

FALL RECREATION

The otherwise healthy-looking young men hobbling around the Institution have probably been to the opening practices for the SI touch football team. Oliver Grant of duplicating, the team coach, invites all would-be-athletes to attend work-outs on Saturdays at 11 a.m. at the Amidon School playing field. The team is sponsored by the Recreation Association and plays representatives of other government agencies. Other fall activities include bowling, gun clubs and the SI chorus. For further information call Jim Piper, 5944.

Olin & Co. Face Challenges In Restoring Works of Art

By Reed Hunds

The National Collection of Fine Arts and the National Portrait Gallery include:

—an 1835 portrait of Andrew Jackson

—an 1835 portrait of Andrew Jackson that has spent the last century under two layers of paint the artist never added.

—a 1965 abstract by Adolph Gottlieb that is in danger of crumbling at any moment.

—Another abstract on which an anonymous vandal has written "This is trash."

—And numerous old oil paintings disfigured by myriad cracks over their surfaces.

But with microscopes, hot wax, ultrasonic jackhammers, and steady hands the restorers in the NCFA/NPG Conservation Laboratory will soon have these works almost good as new and will also guarantee their preservation for years to come.

The miracles of restoration wrought by the Conservation Lab are to a great extent due to the unique scientific approach taken by Conservator Charles Olin.

Olin spent three years at the Institute of Fine Arts at New York University learning the art of art conservation. In addition, he holds a degree in physics. His wife is a chemist and the two have combined to assemble a striking range of equipment and techniques for conserving art works.

Olin has his own theories as well as techniques, however. Conservators in this country are usually art historians first. But Olin views the conservator as his own man, linking the skills of "historian, curator, connoisseur, and scientific analyst." Olin says the history is "nice to know" but most of all, he claims, the conservator needs to know the painting as "a material object."

In handling each painting, Olin will first seek to uncover its basic form, by removing the marks of time, dirt, and past restorers. Then he tries to make the painting "presentable, but without misleading the viewer."

One example of "misleading" restoration, he explains, occurs when restorers change color and composition in covering cracks with new paint. "It is too much trouble for them to fill in each crack, so they just paint over whole areas," Olin says.

The Conservation Lab takes the time to repair each crack. They are careful, Olin notes, to make everything they do to a painting "reversible." That way, any later restorer can easily repeat Olin's method

Ritterbush Visits Unexplored Area

Philip Ritterbush, special assistant to Secretary Ripley, was one of an international party of eight that explored the mountains, valleys and glaciers of a hitherto untracked section of Baffin Island in the Canadian Arctic last month on an Explorer's Club expedition.

The group conducted a general reconnaissance of a 20-mile long valley glacier system in the Cumberland Peninsula, observing the flora, fauna and topography of the region. In the process they ascended seven previously unscaled peaks.

The main discovery of the expedition, Ritterbush reports, was an ice-peak which at 5650 feet was several hundred feet higher than Mt. Raleigh, up to now considered the highest in the area. The group, which reached the top on August 11, named the peak "White Wind Tower." They named the principal valley the "Valley of the South Wind."

"The fact that nobody had been in this area before lent it a sort of enchantment that was a wonderful thing to experience," said Ritterbush, whose previous extensive climbing has been concentrated in the Alps

The group reached its expedition site by chartered plane, a fact that prompted Ritterbush to note that his was one of the last parties for whom entry into unexplored territory of the Canadian Arctic is possible. The entire area is rapidly being opened by aircraft, he pointed out.

A comprehensive report on the vacation expedition is being prepared.

of "getting down to the roots of the painting."

Every step in restoration takes many hours. The painting may first be photographed in any of several ways—three are: using specular reflection lighting, which like moonlight on water reveals the waves in a surface; employing raking light, which picks up any bumps or ridges; or making ultraviolet photos which expose the way the paint was applied.

With a fine needle-point instrument called, ominously, an ultrasonic jack-hammer, the restorer may take a small sample from the painting. "The sample is so small that I could take a hundred from a painting and you would never notice it," says Olin.

Photos and chemical analysis of the sample help Olin and his workers learn "everything there is to know about the painting" and then "like a doctor" Olin prescribes the treatment.

In the case of the abstract with "This is trash" scrawled across it, the treatment Olin has decreed is a painstaking application of acetone. The chemical dries quickly and when peeled off takes the writing with it. But only a fraction of a square centimeter can be done at a time: this job could take a hundred hours, Olin reports.

In many other instances the treatment includes putting on a new canvas—applied with hot wax, resin and air pressure.



One of the many problems which the NCFA/NPG conservators must deal with is preservation. Detail above shows cracks beginning to form in Hans Hofmann's "Fermented Soil". The trouble spot is pointed out by the arrow in the large picture. Because Hofmann used an impasto oil technique on an unsupported canvas, the weight of the unusually thick paint is pulling on the surface. The lab plans to slow down the disintegration by putting the canvas on a solid mount, and relieving some of the effects of gravity, but new techniques must be found to deal with the new problems posed by the untraditional styles and materials of contemporary artists.

But for the Gottlieb abstract a new method will have to be invented, because the large globules of oil paint would crumble under pressure Olin has not solved this problem, and it serves to exemplify the difficulties modern artists pose for the restorer

The new acrylics and other materials

artists now use all have to be analyzed carefully to discover how they deteriorate and how they can be saved. For the last step in Olin's three-pronged conservation effort, after uncovering and restoring, is preservation. Olin is still developing his methods, but he aims to preserve for the future as well as restore for the present.

TWO VIEWS OF AN OCTOPUS

Author, Reviewer Discuss Book

By Thomas C. Witherspoon

A young lady who was employed at the Smithsonian a number of years ago was heard to remark soon after she took up her duties that "This is the most fascinating place I've ever worked at." Some time later, a short time before her departure, it was reported that she was frequently heard to proclaim loudly, "This is the most ridiculous place I've ever worked ot."

The account is without foundation in fact, but its persistence as legend provides a key to the proper approach to an appreciation of Geoffrey T. Hellman's story of **The Smithsonian: Octopus on the Mall,** published in July by Lippincott (\$5.95, 224 pages, no illustrations) after a three part serialization last fall in **The New Yorker.** (The book and serial are almost identical.)

For Hellman's truly affectionate—the

The TORCH invited Geoffrey T. Hell-

man, author of the new book The Smith-

sonian: Octopus on the Mall, to comment

on his reasons for picking such a title,

and asked whether the 1967 Smithsonian

is the same Institution he fell in love with

I apologize for writing you in long-

hand, but I am on vacation and have no

typewriter. The title of my book is "The

Smithsonian"; "Octopus on the Mall" is

the subtitle. I didn't want to have a sub-

"The Smithsonian," all by itself, lacked

sex appeal. What I had in mind, of

course, was the way in which, since its

establishment, the Institution has

stretched out from one really operative

activity-Joseph Henry's original-re-

search project—to some fifteen or sixteen

bureaus; and grown from one building on

the Mall to five or six, with two more in

the offing. Not to mention the many

other encampments in Washington and

the surrounding countryside, in Cam-

bridge, Mass.; and in the Panama Canal

Zone. The octopus has put on speed since I fell in love with him in the 1940s,

and I suppose that his growing diffusion

of sites and functions (Will his tentacles

have acquired a New York outpost in the

Cooper Union Museum by the time you

get this letter?) makes it most difficult to

settle one's affections on him, but I don't

think that my cephalopodian reference

has (as you intimate) "an unsavory con-

notation." Let me put in a good word

for the octopus in general. Since hearing

publishers felt that

in the '40's. His reply follows.

title at all, but my

barbs are more like Cupid's darts—report on his love affair with the Smithsonian emphasizes the fascinating and seemingly ridiculous (depending on your sense of humor) aspects of the SI as he has encountered them over a number of years. From his delight in the portraits and statues that used to be displayed in the rotunda of the Museum of Natural History, including a painting of a lady with orchid in hair fondling three black leopards, to his accounts of the SI's problems with the brothers Wright (mostly Orville) and the widow of one of its art benefactors, the general tenor of the book is one of genuine pleasure in the curious charm of a venerable and oh so multifaceted institution. He does take us seriously at times—well, he tries to—but a spirit of fun usually overwhelms him, especially when he relates a story of how very seriously the SI-and often others-

from you, I have looked him up in the Encyclopedia Britannica, where I find, with respect to the literal meaning of "unsavory" as "tasteless":

"Octopods have long been considered a great delicacy by peoples of the Mediterranean area who prepare them in many ways. . . . When properly prepared, the flesh is sweet, tender, and demands a high price."

I myself have eaten octopus, or "poulpe," in the south of France, and can vouch for these three adjectives.

Now, in connection with the figurative meaning of "unsavory" as "morally offensive," the Britannica has this to say:

"Large octopods have long enjoyed a reputation for ferocity, no doubt because of their sinister appearance, and exaggerated stories of their attacks are numerous. By nature they are retiring animals. . . . The female guards the eggs during the four to eight weeks required for the larvae to hatch. . . . cleaning them with her suckers and agitating them with water from her funnels."

However, this belated research makes me wonder whether the subtitle is appropriate, after all. Can the 1967 Smithsonian be considered a retiring animal? I asked a friend of mine in the advertising business what I should have called the book, and he replied, without a moment's hesitation, "The Smithsonian and Brigitte Bardot." Alas, it is too late.

Sincerely, Geoffrey T. Hellman sometimes takes itself. Hellman's history of the Smithsonian Scientific Series (pages 201-07) is a case in point.

The book is not and does not purport to be—despite the publisher's jacket blurb—anything like a complete history of the SI. The reader expecting this will be disappointed if not dismayed. There are other books which attempt to do this (how successful they've been is another matter), most of them published by the Smithsonian. Hellman's volume contains, however, many stories that have never appeared elsewhere, and his approach to the well known material, such as James Smithson, THE WILL, and the founding of the Smithsonian (at the same time the planet Neptune was discovered, for what that's worth) is refreshingly different, slightly irreverent, and probably completely accurate.

Hellman's story of how Secretary Baird in his own quiet way eventually triumphed over Secretary Henry in turning the SI from an almost strictly research institution into a museum reads very much like a melodrama, despite the reader's complete awareness of the facts of the case. Secretary Henry writes to Louis Agassiz, a Regent and opponent of Baird: "If Mr. Baird would attempt to interfere with the policy of the Institution I would not hesitate to ask him to resign, and to insist on his doing so, as I did in the case of Mr. Jewett. But I have not the least idea of any trouble with him."

This ironic statement is handled by Hellman with as much compassion as humor. Indeed, Hellman's approach brings both men to life as no writer has managed heretofore. The reader comes away from the book with an idea of these Secretaries, and most of the others, especially Dr. Abbot, as real human beings, not statues to be casually venerated. (In this context, read of the Smithsonian's attempts through the years to get Congress to appropriate funds to erect a statue of Secretary Baird.)

All in all, Hellman has done a fine job, and the Smithsonian reader is likely to be disappointed only in that he knows so much more that might have been told. Unfortunately, the thousands of closely printed pages that a truly comprehensive account would require would be very hard to get through and doubtless prove overwhelming in the end. I think we should thank Mr. Hellman for giving us what he has: a warm-hearted and human account of a very complicated institution.

15 on Armed Forces Radio

America's military personnel abroad will soon learn that happiness is a Canela Indian quality and how the harpsichord developed.

They will hear about these and other interesting subjects from Smithsonian staff members over the Armed Forces Radio Network.

Fifteen SI staffers so far have prepared five-minute tapes for the network, which has some 300 stations in 35 different countries. The citizens of these countries who listen to AFRS programs will swell the audience for Smithsonian programs beyond the military total.

Participants so far include:

James Cornell, SAO; Dr. William H. Crocker, cultural anthropology; Paul Desautels, minerals; John C. Ewers, North American anthropology; Paul Garber, NASM; Dr. Nicholas Hotton, vertebrate paleontology; Dr. Brian H. Mason, meteorites; Mendel L. Peterson, armed forces history; Virginia Purdy, NPG; Dr. Theodore Reed, Zoo; Dr. David Scott, NCFA; Robert G. Stewart, NPG; James M. Weaver, musical instruments; Peter C. Welsh, GOUS; and Robert B. Widder, MHT exhibits.

William C. Grayson, Mrs. Sylvia DeBaun, Miss Karen Loveland and Albert J. Robinson of the Office of Public Affairs are coordinating the project.

Computers

(Continued from page 1)

will help speed up administrative paperwork.

The computer will also do what is called information storage and retrieval work (ISR). This means that when asked even esoteric questions like, "How many Ph.D.'s from Yale who have been to the North Pole are working at the Smithsonian?", it will be able to pull the answer out of its memory in seconds.

The machine will do scientific calculations as well.

Youths Help Prepare Museum

(Continued from page 1) States. Most recently, he served as a

program analyst for the Office of Eco-

nomic Opportunity.

Born in Washington, Kinard is a graduate of Springarn High School and later attended Howard University. He holds a B.A. degree in sociology and history from Livingstone College, Salisbury, N.C.

Over the past several weeks, youths from Trailblazers, a summer program for teens, have worked with Kinard to ready the facility for its grand opening.

Teenagers from the Neighborhood Youth Corps and Work Scholarship Programs also have helped in the scraping, plastering, painting, and indoor-outdoor decorating. The entire interior of the old Carver Theater has been renovated.

Outdoors, they have been planting trees and shrubs and making walks on an abandoned plot of ground. The University of Iowa Demonstration Elementary School donated colorful modern murals that will be exhibited along a fence bordering the museum's grounds.

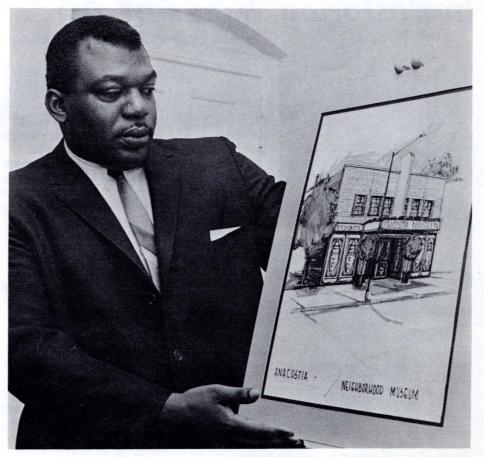
The Trailblazers have also transformed the museum lobby into a graphic arts gallery featuring "before" shots of the facility and pictures of the neighborhood. The Eastman Kodak Company provided cameras and training.

In addition to exhibits, Mr. Kinard said the museum will experiment with the use of films, slide shows, and music in connection with the displays.

Such activities as theater and modern dance productions, further reflecting both the educational and community center aspects of the Anacostia Neighborhood Museum, also will be considered by the advisory council.

Aboriginal Originals

A sales exhibition of bark paintings by the aborigines of Australia runs September 1-24 in A&I. Employees are entitled to a 10 percent discount on



John Kinard, director of the Anacostia Neighborhood Museum opening this month, examines an artist's rendition of how the old Carver Theater should look when renovation is completed.

Columbia University Professor **New Director of SI Libraries**

Dr. Russell Shank, formerly associate professor in the Columbia University School of Library Service, has assumed his new position as director of the SI libraries.

Dr. Shank, 42, reported September 1 to fill a post that had been vacant for more than a year.

At Columbia, Dr. Shank taught a basic course in science literature and an advanced course in the literature of engineering and the physical sciences, as well as other offerings in bibliography, science, and administration. He also directed a study of science libraries and library resources in the New York City area for METRO, the New York Metropolitan Reference and Research Library Agency.

The new director holds a B.S. degree in electrical engineering from the University of Washington (Seattle), a B.A. in library science and a Master's in business administration from the University of Wisconsin, and a Ph.D. in library science

at the University of Washington, as a personnel specialist at the Milwaukee Public Library, as engineering and phys-

from Columbia. He has served as a reference librarian

ical sciences librarian at Columbia, and as assistant university librarian at the University of California at Berkeley.



SUCCESSFUL ALUMNUS — Former SAO satellite tracking coordinator Karl G. Henize is one of the 11 civilian scientists recently selected as NASA astronauts. Dr. Henize, a native of Ohio and a PhD graduate of the University of Michigan, joined the Observatory in 1956 as a Senior Astronomer in charge of establishing the 12 original Baker-Nunn stations in the SAO tracking network. Since 1959, Henize has been a Professor of Astronomy at Northwestern University. This spring he was named senior astronomer of Northwestern's new Lindheimer Astronomical Research Center at Evanston, Illinois.

Cooper 'All-Time Master' in Paleobiology

By Mary M. Krug

G. Arthur Cooper, former chairman of the Department of Paleobiology in the Museum of Natural History and now a senior scientist, is a modest, quiet man who has been called by a colleague "not only the outstanding living scholar, but the all-time master" in his field.

As Dr. Cooper puts it, his lifelong concern has been "the little beasts"brachiopods and other fossil invertebrates -so important to the study of evolution and knowledge of the past.

The study of these little beasts is not usually considered dramatic-"one of the crosses you bear in this kind of game. . . . You work very hard and not very many people in the world care.'

But if the research itself does not appear dramatic to most people, the statistics are certainly staggering. Dr. Cooper's most recent studies, years of concentration on the Permian brachiopods of Trans Pecos, Texas, have resulted in more than

60 tons of stone processed to yield literally millions of fossil specimens that fill 1,500 drawers in MNH.

Collecting these specimens has demanded unusual physical as well as mental exertions of the 65-year-old scientist. "Most paleontologists carry only a hammer and a collecting bag and collect loose specimens from the surface; Cooper goes to the field with a heavy sledge hammer, pinch bars, and a truck and will quarry and break tons of rock to get what he wants," says a colleague.

The average stone Dr. Cooper brings back from the field weighs between 100 and 200 pounds. He once took a sample that required four people to get it into the car. These large blocks have forced him to become a "mass productionist" in a technique that was formerly used only on a limited scale in recovering specimens. He etches the fossils from the rock in an acid bath.

Large vats in the basement of MNH

hold the acid-covered blocks. "An immoral sounding machine called a "shoplifter" lifts the blocks into the vats, a job that was done by hand "before the Institution became opulent enough to buy a machine.' In those less opulent days Dr. Cooper

was also his own photographer and even typist. Now, in his 38th year at the Institution, there are ten scientists on the invertebrate paleontology staff, and there is, according to a distinguished British geologist, "universal recognition of the U.S. National Museum as one of the great world centers in palaeobiological research.'

After etching comes the really tedious but most important step in Dr. Cooper's fossil hunt, "picking the goodies out of an enormous amount of debris of decalcified rock." It demands of the paleontologist a strong pair of eyes to match his strong back. Then the fragile little creatures, some of them still with spines as delicate as hairs after 250 million years, must be classified.

This very basic research, says Dr. Cooper, is "laying down the foundationthe kind of paleontology that has to be done before theoretical considerations can be made.'

Two or three years from now other paleontologists will be able to build on this foundation, when the book on Dr. Cooper's Texas research is completed. Dr. Richard Grant of the Interior Department, who worked with Dr. Cooper in the research project, is also cooperating in preparing the book. The manuscript now runs to 5,000 pages.

Dr. Cooper's other published works are "already recognized as classics" among his fellow scientists. "Through such works, he is known to stratigraphers and paleontologists everywhere in the world, not one of whom would dispute the opinions that he is the greatest living systematic paleontologist," says one of them.

"Very few indeed," concludes another, "have earned so deservedly an international reputation in palaebiology."



G. Arthur Cooper examines some of the millions of "little beasts" he has discovered in the Trans Pecos area of Texas.