February 1958

THE SMITHSONIAN

TORCH

SMITHSONIAN INSTITUTION • WASHINGTON, D. C.
Plans for the new museum building of History and Technology were announced recently by Senator Clinton P. Anderson of New Mexico, Chairman of the Joint Congressional Committee on Construction of a Building for a Museum of History and Technology for the Smithsonian Institution. Plans for the new museum building, which will be erected on a site bounded by Constitution Avenue, Madison Drive, 12th Street, and 14th Street, have been approved by the Special Joint Committee of the Senate and House of Representatives, the Regents of the Smithsonian Institution, the Commission of Fine Arts, the National Capital Planning Commission, and the General Services Administration. The building was designed by the architectural firm of McKim, Mead & White.

The new building is contemporary in design, but it has retained a classical spirit so that it will harmonize with the existing buildings on the Mall and on Constitution Avenue. The bays of the exterior of the structure are related in scale to the mass of surrounding buildings. Windows in the narrow faces of these bays provide effective daylight areas to relieve the large, artificially lighted, enclosed spaces required in modern museums.

The Smithsonian's unequaled technological collections illustrating the history and development of science and engineering will be exhibited on the first floor on the level of Constitution Avenue. Many of these important exhibits never have been displayed before because there was no space for them. On the upper floors of the new building will be presented the great national collections of the Smithsonian illustrating civil and military history and the growth of the United States.

The exhibition floors of the building are arranged to provide for the maximum convenience of the more than 5 million visitors who are expected to come to the building each year. Space for necessary workrooms, laboratories, and study collections is provided above the exhibition floors and in a basement below the Constitution Avenue level.

Visitors starting to view any part of the great new museum could most conveniently begin in the centrally located flag hall. The principal object of this hall will be the famous Star Spangled Banner, which measures approximately 30 by 42 feet. This flag, which flew over Fort McHenry in 1814 and which inspired our national anthem, has been characterized by museum experts as the number one museum item of America.

Several years' work has already been given to the plans for the internal arrangement of the exhibition halls and the other facilities of the structure. Detailed plans of these areas are now being prepared, and, inasmuch as funds for the construction of the building have been appropriated, it is expected by the General Services Administration that work will start on the new building early this summer.
LECTURE ON MEDIEVAL BURMA

The fourth illustrated lecture in the Freer Gallery's annual series was presented at the Gallery on February 11 by Dr. Jane G. Mahler, associate professor of fine arts, Barnard College, Columbia University. Dr. Mahler's lecture, "The Glory of Medieval Burma," described the monuments and the civilization of the medieval Burmese capital at Pagan.

Educated at the University of Wisconsin and Columbia University, Dr. Mahler has served on the faculty at Barnard College since 1935; she is also a member of the Columbia University Graduate Faculty. In 1950 she received the first and only doctoral degree in Chinese art ever given by Columbia. Dr. Mahler recently returned from a year's travel in Turky, Iran, Pakistan, Afghanistan, India, Ceylon, and Burma, where her particular problem was to trace evidences of the cultural interchanges between these lands from the fourth to the eighth centuries A.D.

LECTURE ON ARCHEOLOGY

All employees of the Smithsonian Institution are invited to attend an illustrated lecture on "Recent Discoveries at Gordion," by Dr. Rodney S. Young, curator of the Mediterranean Section of the University of Pennsylvania.

The lecture, jointly sponsored by the Archaeological Institute of America and the Smithsonian Institution, will be given in the Auditorium of the Natural History Building on Thursday, February 27, at 8:30 p.m.

The archaeological investigations carried on since 1930 at the site of the ancient capital of Phrygia by the Museum of Pennsylvania have yielded significant and fascinating discoveries concerning the Phrygians, who flourished in Anatolia in the dark age between the fall of the Hittite Empire and the rise of Greece. The material culture of these people has been almost unknown up to the present. The excavations made by Dr. Young and his colleagues at Gordion have now reached a level dating from the eighth and perhaps the ninth century B.C. Some spectacular finds have been made, indicating especially that the Phrygians were much more civilized than has been thought and were well ahead of the Greeks at the beginning of the seventh century when they were overwhelmed by a barbarian (Cimmerian) invasion.

STRINGING US ALONG

The Office of the Registrar recently received an address from the "U.S. Department of Anatomy." It was postmarked Seattle, Wash., but the return address read General Delivery, Beloit, Wis. Inside the envelope were three items: two plain white cards and a carefully wrapped piece of yellow string!

SHORT AND SWEET

Here's another approach to simplified spelling:

0, MLE, what XTC
1 always feel when UIG
2 I used to rave of LH'S eyes
3 LC I gave countless sighs
4 KP, E, and LBR
5 I was a keen competitor
6 But each now's a non-MTT
7 U XCL them all UC.

REGENTS SEE ANCIENT SKULL

The skull of a man before man" has lived in the Near East at least 45,000 years ago was shown Regents of the Smithsonian Institution, headed by Chief Justice Earl Warren, at their annual meeting held here last month.

It was a cast of the reconstructed skull of a so-called Neanderthal found last spring in a cave in northern Iraq by Dr. Ralph Solecki, Smithsonian associate curator of old world archeology. Dr. T. Dale Stewart, the Institution's director of physical anthropology, recently returned from Baghdad, the Iraq capital, where he spent three months reassembling the skull from fragments. The skull is that of a man about 40 years old.

The net result of Dr. Stewart's work was a reproduction of the restored skull of a quite unique humanlike creature who lived in the Near East during the Mousterian cultural period—roughly 45,000 years ago. This was America's Neanderthalers, but only the time the present human race became established.

Dr. Stewart went to Baghdad and reconstructed the skull, a job requiring extraordinary knowledge, skill, and precision; at the request of Dr. Nagi al Asil, former foreign minister and now Director General of Antiquities of the Iraq Government. The original skull is being retained in Baghdad. The cast—the only one outside of Iraq—is a gift to the Smithsonian Institution from the Iraq Museum.

Dr. Stewart says the individual undoubtedly was a Neanderthal. This was a race of humanlike creatures whose scant remains have been found scattered through Europe, western Asia, and the Near East. They so apparently preceded the true human race, Homo sapiens, as it is known today, throughout this region by a few thousand years. They were about the size of present-day man and had essentially all our human features. In general these features were cruder. They were creatures mainly of the last great ice age, presumably cave dwellers, with a falched-stone culture. They had massive jaws, large faces, protruding brows, and large teeth. Their relation to present-day man is debatable, but it is quite generally doubted whether they were directly ancestral although they lived in the same area where the oldest truly human remains have been found.

The first Neanderthal remains were found in Germany almost a century ago. Since then many scattered specimens have been found. They now are divided into three groups—early Neanderthal, a form from the last interglacial period in eastern Europe; classic Neanderthal, the central European cave dweller of the last ice age; and the near eastern Neanderthal, a late form represented by the present specimens.

The skull reconstructed by Dr. Stewart, however, shows some quite primitive features considering the date assigned to it. In some respects the face recalls the so-called Rhodesian man of South Africa, sometimes included among the Neanderthals. The lower jaw also recalls that of the famous Heidelberg man of central Europe, a much more primitive creature of about 100,000 years ago. Whether there ever was any actual connection between Heidelberg and Neanderthal has been much debated.

Dr. Stewart found the parts of the Iraq skull in quite small fragments, which had to be fitted together—a super crossword puzzle job made more difficult by the fact that the fellow's skull had been bashed (so scattered specimens, presumably in fights with clubs. He apparently had survived all these injuries.

Dr. Stewart's work in Baghdad was a cooperative project of the Iraq Government, the American Philosophical Society, and the Smithsonian Institution.
SALK ANTI-POLIO PROGRAM

One hundred and nine employees responded to the offer of Salk anti-polio inoculations, in conjunction with the Department of Justice program, at the low cost of $2.00 for three inoculations. The first inoculation was given on February 13. All persons who subscribed to the series will be notified when to report for the second inoculation which will be in about four weeks.

ZOO NEWS

The National Zoological Park has acquired a pair of black-casqued hornbills. These birds live in the forests of the Belgian Congo and are rarely seen in collections. This pair was captured in the Belgian Congo with the authorization of the General Government and placed under the care of the Internationales Kolonialkomitee whose aim is to promote science. The Federation's honorary president is King Leopold of Belgium.

Prior to shipping, the hornbills were cared for by Mr. Walter Van den Berg, director of the Société Royale de Zoologie d'Anvers. Then, under instructions from Mr. P. Stam, the Royal Inspector of Colonies at Brussels, they were flown to the National Zoological Park as gifts from the Belgian Government.

The addition of these two birds gives the Zoo the finest collection of hornbills in the United States. Other species in the collection are the Malabar, the black-and-white casqued, the Philippine, the concave-casques, and the Abyssinian.

The hornbills were formally presented to the Smithsonian Institution, the National Zoological Park, and the citizens of the United States by Baron Leopold Dhanis, Consul for the Belgian Embassy in Washington, at a brief ceremony on January 16.

The National Zoological Park is very proud of a letter it has received from the White House commending it for more than meeting its quota in the 1957 Blood Program.

The Zoo played a part in the Christmas Pageant of Peace. Six Virginia deer and two white falow deer, which were in the Zoo's surplus stock, were taken to the Ellipse on December 20. They were brought home on January 3. While at the Ellipse a keeper from the Zoo visited them daily to make sure they were being properly cared for. Our deer attracted a great deal of attention and probably were the most popular exhibit there-except the Christmas tree. A few weeks ago, the Zoo received a card which read: "The Christmas Pageant of Peace is honored by and gratefully acknowledges your participation in the 1957 Program. Edward F. Carr, President and General Chairman."

EUROPEAN TOUR CANCELLED

Sorry to say we failed to reach the quota of employees required for a chartered flight to Europe. The trip is therefore cancelled for this year. Perhaps we will try again at some future date.

The best way to forget a mistake is to admit it.

NOTICE TO OHA MEMBERS

On February 1, 1958, our hospitalization group was divided into two groups. Members located in the Arts and Industries Building, National Air Museum, Personnel Division, Office of Exhibits, and those of the guard force will submit payments to Mrs. Ruth W. Odom, Room 198. All other payments will be submitted to Mrs. Betty J. Morgan, Room 124, E.I. Building.

You are again reminded that payments are due on Wednesday, Thursday, and Friday of the First Federal pay week in each month; payments will not be accepted at any other time.

SKELETAL AGE REPORT

The Quartermaster Research and Development Command, Environmental Protection Research Division, Matich Mass., recently issued Technical Report EP-45, "Skeletal Age Changes in Young American Males," by Thomas W. McKern and T. D. Stewart. This publication reports the result of Dr. Stewart's work on the remains of American soldiers killed in Korea and was prepared by Dr. McKern under Dr. Stewart's direction while the former was assigned to the Division of Physical Anthropology during 1955-1956.

NOTSOME WHEN YOU'RE FEELING IMPORTANT
SOMETIMEN WHEN YOUR ZOO'S IN BLOOD
SOMETIMEN WHEN YOU TAKE IT FOR GRANTED
YOU'RE THE BEST QUALIFIED IN THE ROOM
SOMETIMES WHEN YOU TRY TO SHOW OFF YOUR GOING
WOULDN'T BE AN UNFILLABLE HOLE
JUST FOLLOW THIS SIMPLE INSTRUCTION
AND SEE HOW IT LIGHTS YOUR SOUL:
TAKE A BUCKET AND FILL IT WITH WATER
PUT YOUR HAND IN IT--UP TO THE WRIST
FULL IT OUT, AND THE HOLE THAT'S REMAINING
IS A MEASURE OF HOW YOU'LL BE MISSED.
YOU MAY WANT ALL YOU PLEASE WHEN YOU ENTER
YOU MAY STIR UP THE WATER GALORE
BUT STOP--AND YOU'LL FIND IN A MINUTE
IT LOCKS QUITE THE SAME AS BEFORE.
The Moral in this quixot example is
JUST DO THE BEST THAT YOU CAN
BE PROUD OF YOURSELF--BUT REMEMBER:
THERE'S NO INDISPENSABLE MAN.

LETTER FROM HOME

Following are some excerpts from a letter dated January 19 from Lucile Hoyne, who is presently at Oxford on an educational leave from the division of physical anthropology:

"Dear Friends: Happy New Year!

And thanks so much for your cards and notes. I sure appreciated them, and I think particularly the news of what is cooking at my second home.

The last term ended December 8, to allow the students to get home for the holidays, and classes start again tomorrow for the second term. For two weeks the offices and libraries at the University were closed tight, so that we had a vacation whether we wanted it or not. The vac, they call it; I think it is short for vacuum.

On Christmas morning we opened presents under an American-type Christmas tree (with British decorations). Then I set off on 'Montezuma' (motor scooter) for a carol service at church. I could not help remembering the carols under the Maudite (motor scooter) during the war. I think we had a vacation whether we wanted it or not. The vac, they call it; I think it is short for vacuum."
Many had the same words, but all had strange, but rather pretty tunes.

I had an invitation for Christmas and Boxing Day and decided to go to church. Christmas here consists of a 2-day celebration. Boxing Day, the stores did not open, but the adults seem to be on a 2-hour feeding schedule, but most of the stores did not open until Monday. (Population is about 100,000, which is no hick town; but most of the 7,000 students here, and you could see the dent it made.)

"I have done a bit of sightseeing on Montezuma". Sunday afternoon after Christmas I went out to Westy, which used to be a village, but has become a suburb with the spread of the city. There is a lovely old Norman church there, built about 1150, with much of the original stone work, and of course later additions as the church grew. It is on a hill above the Thames (called the Isis here).

"Last Sunday afternoon we took off again, this time to the other side of town—to Westy, about 13 miles away. Westy is famous for its blankets, which have been the principal industry for about 300 years. It was cold and windy—which is not so good on a motor scooter—but it was clear and the scenery was nice. Since Montezuma's cruising speed is about 30 MPH, you go slowly enough to enjoy it.

"I spent Friday exploring London and seeing some of the things I have read about. I was staying at the Society for Visiting Scientists, near Piccadilly Circus, so I walked down Regent Street looking at the stores and had my first look at Piccadilly. I took a bus ride past St. Paul's Cathedral and to the Bank of England, and wandered around the financial district, Fleet Street, and other places.

"We American Embassy at 2 to register, so I had to hurry back to Grovesnor Square. I hadn't realised how much I had missed our flag—Constitution Avenue has so many of them that I really miss seeing it. I had a few minutes to spare, so I went over to the Cultural Office, and read the evening paper; most of the stores did not open until Monday. (Population is about 100,000, which is no hick town; but most of the 7,000 students here, and you could see the dent it made.)

"Tractically everything is closed on the 26th. On the 21th things are going again, this time to the other side (of the Isis here)."

There is a lovely old Norman church which has been the principal industry here. It was rather stale, but it was a pleasure to see the funnies, ads, and news of home. There was a story about the Smithsonian's new collection of fish from Australia, and it was almost as good as a trip home. The ads provided an excellent opportunity to compare prices on things that I have been thinking of buying.

"Piccadilly Square reminded me very much of Times Square. Some crowds of sightseers, theater-goers, and people just wandering around. London is so much like New York that I'm always glad to get back to Oxford. The railroad station here is piled high with trunks and bicycles, for the students are coming back. (They must take all of their gear except books out of their rooms when they 'go down' and must cart it all back. This includes not only clothing but their teapots, china, silver, and so forth) After coffee after lunch and tea at 4 in their rooms—cooking in the pantries on each floor in the colleges. The girls have to do their own; the scouts in the men's colleges do this for them.

"I'll be glad to get back into action tomorrow and to see some of my new friends again. Regards to all, Lucile."

SPECIAL EXHIBIT

The National Collection of Fine Arts is sponsoring the 22nd Exhibition of the Society of Washington Printmakers. The exhibit opened on January 26 in the foyer of the National History Building and will continue through February 16.

"I was surprised to find prints in this exhibit are Rowland Lyon, National Collection of Fine Arts, and Jacob Kainen, curator of graphic arts.

NEW APPOINTMENTS:

Executive Officer: Vaughn Harmon (APO)

Observers:

Harsyn G. Utter (APO)

Robert H. Thomas (APO)

Charles F. Copenh, Jr. (APO)

George J. Baccali (APO)

Computer:

Dorik Y. Nechau (APO)

Exhibits Technician:

John C. Lingeback (Office of Exhibits)

Exhibits Worker:

Kurt F. Hauschildt (Geology)

Engineering Draftsman:

Donald T. Tracey (APO)

Draftsman:

Gerhard B. Deubs (EMG)

Librarians:

Charles G. Berger (Library)

Juliette S. Bevis (Library)

Library Assistant:

Charles H. Moore, Jr. (APO)

Medical Science Aide:

Donald E. Cogswell, Jr. (R&D)

Physics Science Aide:

Charles H. Moore, Jr. (APO)

Engineering Aid:

William N. Cogswell, Jr. (R&D)

Clarence W. Johnson (R&D)

Pete Stone (Ethnology)

Administrative Officer:

Donald F. Bullo (APO)

Administrative Assistant:

Helen M. Hogan (NCFA)

Administrative Clerk:

Raymond K. Woot (APO)

Senior Clerks:

Wilbert L. Enlow (BSIE)

Paul J. Cooke (BSIE)

File Clerk:

David C. Lyman (BSIE)

Time, Leave and Payroll Clerk:

Sue F. Crone (Piscal)

Bindery Worker:

Eddie D. Dent (Library)

Clerk-Stenographer:

Isadore M. Melvin (Office of Planning Officer)

Syliva L. Boyd (APO)

Lois T. Callahan (APO)

CONVERTED TO CAREER APPOINTMENTS

The following employee has completed the required 3 years in career-conditional status and is now a full-fledged employee:

Willie Evans (Guard Force)
The Smithsonian Traveling Exhibition Service's exhibit of "American Folk Art" is to be shown in the U.S. Pavilion at the Brussels World's Fair, opening in April, will demonstrate America's rich heritage in the popular arts.

The earliest in the exhibition is a charming 17th century "Portrait of Margaret Gibbs" by an unknown artist, while the latest is Horace Pippin's "Portrait of Mrs. John A. Pope," dated 1942. No living artists are included.

Approximately 70 carefully selected paintings and sculptures, many by anonymous artists, stress life in America in the 19th and 20th centuries. Many of them have never been shown in public before, and only a dozen were included in the comprehensive exhibition, also assembled by the Smithsonian Institution, which was shown in Lucerne, Switzerland, in the summer of 1954, and subsequently in Vienna, Dortmund, Munich, Stockholm, Oslo, Manchester, and London, under the auspices of the Austrian Information Agency. Apart from this exhibition, American folk art has never before been exhibited abroad.

A number of paintings and sculptures had to be limited to a fraction of the vast material preserved in American museums and private collections, as no attempt was made to present a complete historical survey. Instead, the Smithsonian Institution searched for well-preserved works of the finest quality only, and for rare examples by lesser known artists.

Fortunately, and despite the extended loan period necessitated by the duration of the Brussels World's Fair, U.S. lenders responded with great generosity to the requests, notably Colonel and Mrs. Edgar Garbisch, noted collectors of American primitive paintings, who are contributing the largest group of masterpieces to the show.

Other private collectors include: Mrs. Edith Malpert, Miss Ethel M. Howell, Mrs. Maxim H. Towey, Mrs. Charles W. Towey, and others.

Museums lending priceless paintings to the exhibition include the National Gallery of Art, the Abby Aldrich Rockefeller Museum in Williamsburg, the Museum of the City of New York, the New York Historical Society, the Boston Museum of Fine Arts, the Whitney Museum, the Museum of Modern Art, and others.

The collection is particularly rich in portraiture, by both distinguished personalities and beguiling children. Among the former are the outstanding likenesses of Captain and Mrs. Samuel Chandler (c. 1780) by Winthrop Chandler, Mr. and Mrs. Pearce (c. 1835) by Erastus Salisbury Field, three portraits of members of the Brown family (c. 1845) by William Matthew Prior, and the extraordinary self-portrait—the only one in the show—by John Kane painted in 1829. Several children's portraits are also notable, especially the famous "Baby in Red Chair" (1800-1825), the "Baby in Blue Cradle" (c. 1820) of Captain R. Pickett's daughter, and "The Little Boy Holding Watch" (c. 1802).

Several paintings show a distinct historic flavor, notably "General Washington Encamped" by Miss Willson (c. 1820), "Washington and Lafayette at the Battle of Yorktown" by Reuben Law Reed (c. 1860), and "President Lincoln's Funeral" by S. F. Milton (c. 1870).

The exhibition would not be complete without a number of delightful still-life paintings in oil and watercolor. A variety of landscapes from many parts of the country, Chamber's "Niagara Falls" (mid-19th century), W. C. Sharon's "Western Landscape" (4th quarter 19th century), Hicks's "Cornell Farm" (c. 1848), and Pickett's "Coryell's Ferry" (c. 1914-1916) are among the best, definitely deserving mention. The 18th-century "Whaling" and the "Ship Nancy, Homeward Bound" (c. 1810) represent this popular genre. Finally, there are two fine paintings with religious subjects: "Moses in the Bulrushes" (c. 1820) and "Rebecca at the Well." Sculpture is an essential part of the American tradition, and a few pieces are included, the most striking being a large carved "Eagle" (1854) which formerly adorned the first "War Eagle." A characteristic figurehead, "Lady with a Rose" (early 1800's) from the Mariners Museum in Newport News, Va., is also included, as is an "Indian Chief" (19th century) from the Museum of Fine Arts. Two metal weather vanes complete this section of the exhibition.

The exhibition of "American Folk Art" was organized by the Smithsonian Institution under the direction of Mrs. John A. Pope, chief, Traveling Exhibition Service, with the help of a number of experts in the field. Mr. Leslie Cheek, Jr., director of the Virginia Museum of Fine Arts, Richmond, acted as adviser and chief designer of the installation.

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COOPERATION

I've been thinking all day long, but I just can't quite see why I talk about you and you talk about me.

The biggest drawback to organization, and I know that you'll agree, is the things I say about you and the things you say about me.

If you see a member digging for higher hopes or stakes,

Don't make it harder for him by whispering around his mistakes.

You make mistakes, too, you know, I make them plenty, I find.

I don't intend to broadcast yours, so please don't broadcast mine.

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The secret of success is constancy of purpose.

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So let this be our resolution: With higher hopes or stakes.

I won't talk about you.

And you won't talk about me.

---William H. Lewis, BMS

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REUNION FROM IRAQ

Dr. T. D. Stewart, curator of physical anthropology, returned January 13 from a trip to Baghdad, Iraq, where he spent three months reconstructing and studying the Neanderthal skeleton discovered last spring in the Shanidar Cave by Dr. Ralph Solecki.

On the return trip Dr. Stewart hand-carried the first cast of the Shanidar skull so as to be able to show it to colleagues. He stopped first in Ankara, Turkey, where he saw Dr. Musafir Sanydrek, of Ankara University, who had studied the Shanidar infant recovered in 1933 by Dr. Solecki.

His next stop was in Rome where, unfortunately, he was unable to see any of the anthropologists because of the religious holiday (Epiphany).

In Paris he saw Dr. H. V. Wallis, director of the Musee de l'Homme and of the Institut de Paleontologie Humaine.

The last stop was in London where he saw Dr. Kenneth Oakley at the British Museum and had the privilege of examining the original Rhodesian skull. In a side trip from London Dr. Stewart called on Sir Wilfred le Gros Clark and Prof. J. W. Knechtel, and a visit to Oxford. Dr. Stewart also saw Miss Lucile Hoyne, who is on educational leave from the division of physical anthropology.

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RUSSIAN SCIENTIST VISITS

Dr. G. F. Debets, one of Russia's leading physical anthropologists, visited the division of anthropology last month to see the cast of the Shanidar skull. After examining the specimen carefully, Dr. Debets announced that this experience would remain one of the highights of his visit to America.

Dr. Debets came here from New York, where he has been working on Rakimo skulls at the American Museum of Natural History.

ELECTED PRESIDENT OF COSMOS CLUB

Archibald G. Wenley, Director of the Freer Gallery of Art, was elected president of the Cosmos Club at its annual meeting held on January 20.

Mr. Wenley was vice-president of the club last year.

Other Smithsonian staff members who were elected to fill Cosmos Club positions at the same meeting are Paul H. Cecher, chief of the editorial and publications division and public relations officer, who was reelected secretary, and Herbert G. Hageman, the division of birds, who was elected a member of the club's Admissions Committee.

NEW THEORY ON SUNSPOTS

Sunspots are "islands of intense calm floating in the otherwise turbulent sea of the sun's atmosphere."

This thesis, advanced by Dr. Donald N. Menzel, director of the Harvard College Observatory, in the annual report of the Smithsonian Institution, is quite opposite from the concept widely held in the past. This has been that these small, dark regions on the sun's face indicated solar storms or the vertices of solar cyclones.

Throughout history astronomers have held various other theories--for example, that they were "holes" in the horizon which one looked at the sun's relatively cool surface. Actually, of course, the deeper one penetrates the hotter it gets.

The "islands of calm" thesis, proposed by Dr. Menzel, has become possible only with the most recent advances in solar astronomy and especially knowledge of the sun's magnetic fields. The explanation of these curious spots, which vary in abundance through an 11-year cycle and have been credited with all sorts of effects on terrestrial phenomena, is due to "the relatively new science of magnetohydrodynamics which casts new light on the nature of highly ionized gases in the presence of a magnetic field."

Says Dr. Menzel: "A gas so hot that the electrons have been torn from most of its component atoms is highly conductive to electricity. The magnetic fields associated with any electric currents that may be present impart to the gas a certain amount of rigidity, as if the material were semifluid."

"The atoms can flow up and down, to a certain extent, parallel to the lines of force. But we cannot expect the violent turbulence associated with strong convection."

There remain many unsolved problems associated with the sun's outer atmosphere, Dr. Menzel points out in his report. For example, the shining surface of the sun, the part unaffected by sunspots, is by no means uniformly bright. It contains many bright flecks on a slightly darker background--"spots that look like foam-capped waves on a stormy sea." These generally are not sites of sunspots. They are about 300 miles across, on the average, but with much variation in size. In the neighborhood of sunspots they are much coarser. Near the edge of the sun there are locations with reversed magnetic structures, generally referred to as faculae.

An early theory was that the granules were clouds of some solid material, floating in the gaseous atmosphere and appearing more luminous because of their higher light emission, like a gas mantle heated to incandescence. This thesis was abandoned, Dr. Menzel says, because the solar temperature is too high to permit either liquid or solid matter. The granules can be explained, he points out, as follows:

"The turbulent convection in the sun's atmosphere serves to bring the hotter layers closer to the surface."

"We are now in a position," he says, "to understand the darkness of the sunspot relative to the surrounding photosphere (the visible surface of the sun's atmosphere)." In a region where magnetism has not inhibited convection, the outer layers are hotter than they would be otherwise. They are, consequently, more intense in light, but where convection does not occur. In the region immediately surrounding the spots, the convective layer must rise higher."

Curious conditions would result, he says, if the whole surface of the sun were one big sunspot--that is, "if a magnetic field strong enough to inhibit convection through the entire solar atmosphere should suddenly come into existence. The temperature of the photospheric layer of the sun would cool by at least 2,000 degrees, to a value approximating that of a sunspot."

The total amount of energy radiated would decline to about 20 percent of the present value."

"Still just as much heat as ever would be produced in the sun's interior during about 30 million years for this heat to get from the core to the surface. Radiation would accumulate in the interior. This would cause the sun to swell until, in some tens of millions of years, the increased surface area would compensate for the lower radiation into space."

CONGRATULATIONS FROM THE PRESIDENT

Dr. Alan T. Waterman, Director of the National Science Foundation, recently sent to Secretary Carmichael a telegram that reads as follows:

"President Eisenhower has asked me to extend his personal congratulations to all who have been working on the development of satellites for scientific purposes. The Smithsonian Institution, through the Astrophysical Observatory in Cambridge and through the hard-working volunteer Moonwatch teams in this country and all over the world, has been one of the chief proponents of the satellite tracking programs. Will you therefore convey to Dr. Fred L. Whipple, Dr. J. Allen Hynek, Dr. Armand N. Spitz, and all their associates and assistants, this message of congratulations from the President."

RIDES WANTED

Mrs. Mona Lerner, in the Natural History Building, wants a one-way ride at 5:15 p.m. to the 7200 block of 13th Avenue, Takoma Park, Md. This address is off New Hampshire Avenue and extended and Brantge Street, going into Langley Park. Please telephone Ext. 263.

Ride wanted from County Service Building, Hyattsville, Maryland to Smithsonian Institution and return by two employees. Call Mrs. Flood, Ext. 613 or Mrs. Quail, Ext. 341.
S. I. COMMERCIALLY ON BLOOD PROGRAM

Secretary Carmichael recently received a letter from the Government Committee on Blood Donor Recruitment for the D. C. Chapter of the American Red Cross. The letter read as follows: "The American Red Cross is very appreciative of the excellent cooperation of the Smithsonian Institution in the Blood Program. The number of donors appearing during the past year must be as gratifying to you as it is to us. We have been informed that the fine performance is due in large part to your inspiring leadership and great interest in the Blood Program.

"We would also like to commend the recruiters in your organization whose dedicated and untiring efforts have resulted in your agency more than meeting its quota in 1957.

"We wish it were possible to thank each and every donor whose donations were responsible in making this program a success. However, because of the many pints of blood collected during 1957, a little boy is out of the hospital playing ball again, a mother is home safe and sound after her new born infant, a father and breadwinner is back on the job. These people, and many more in the community in which you live, will be eternally grateful. Sincerely, Homer H. Grunenthal."

The actions of men are the best interpreters of their thoughts.

CRUSADE FOR HEALTH FUNDS

The second of our two solicitation campaigns, this one for National Health Agencies and Joint Crusade, will get under way on March 19.

"We will be asked to help support ten great voluntary agencies: American Cancer Society, American Heart Association, the Arthritis and Rheumatism Foundation, Muscular Dystrophy Associations of America, National Association for Mental Health, National Multiple Sclerosis Society, National Society for Crippled Children and Adults, National Association for the Prevention of Blindness, National Tuberculosis Association, and United Cerebral Palsy Association.

"Included in the appeal will be the two Joint Crusade agencies, CARE and Crusade for Freedom. Last year, which was the first annual appeal, personnel of the Smithsonian Institution responded very generously. These contributions were of real value to these agencies' programs. With full cooperation we feel certain that we will surpass last year's fine record.

MOONWATCH NEWS

According to a newsletter dated February 3, the first three sightings of the U. S. satellite "Explorer" reported to Moonwatch teams came from Bryan, Texas, and Albuquerque and Alamogordo, N. Mex.

"Between January 18 and January 30, 56 U. S. Moonwatch teams reported observations of the second Soviet satellite during a total of 137 observing sessions. During the same period, 23 stations in Japan reported observations during a total of 30 sessions.

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CREDIT UNION DECLARES DIVIDEND

A dividend of 4 percent was voted by the members of the Smithsonian Credit Union at the annual meeting held January 21. Members are requested to send in their passbooks so that the dividend may be credited and the passbooks audited by the Supervisory Committee.

The following committees were elected:

Board of Directors:
Mrs. Norma Jean Baker
Thomas F. Clark
Jeremiah A. Collins
James M. Derrow
Miss Lucile McCain
Mrs. Eileen M. McCarthy
Mrs. Margaret W. Peake
Dr. W. W. Schmidt
Capt. William B. Stiles
Credit Committee:
Mrs. Norma Jean Baker
Lt. George E. Cornell
James M. Derrow
Burton E. Gilbard
Cornelius G. Johnson
Miss Lucile McCain
E. L. Roy

STAMP HONORS APO

An 0.15-florin stamp was released December 10 by the Netherlands Antilles paying tribute to the proposed local American Optical Satellite Tracking Station of the Smithsonian Institution's Astrophysical Observatory and the Dutch "Geodetic Astronomical Station, Muizenberg" which was dedicated last August at Curacao.

The stamp was conceived by R. Roelofs, professor of geodesy at the Technical University at Delft, The Netherlands, and was artistically developed by A. van Berven of Harlaem. A total of 300,000 of these stamps were produced.
PERSONNEL CHANGES AT BRITISH MUSEUM

In many ways the British Museum is like the Smithsonian, so recent personnel changes at the British Museum of Natural History as reported by the Office of Naval Research, London, is of interest to us.

"Dr. F. C. Fraser succeeded to the keepership of zoology upon the retirement of Dr. H. W. Parker on 1 October. Parker's tenure was outstanding for his introducing species are populations in nature which not only vary in time space but respond to environmental changes, and therefore require statistical treatment of adequate samples for establishing their taxonomic parameters. This revolution in the practice of systematics, or the "new systematics," which drew systematists abruptly away from considering species as a specimen stuck on a pin or preserved in a museum jar to the treatment of populations, has been amply reflected in Parker's monographic herpetological contributions. Fraser has had a long career of investigating the life and function of whales and is known by zoologists for his co-authorship with J. R. Norman of the "new systematics," which drew systematists abruptly away from considering species as a specimen stuck on a pin or preserved in a museum jar to the treatment of populations. He has concentrated on the structure and function of the auditory apparatus to ascertain how whales detect and make use of underwater sounds. He and his collaborators recently have shown that whales are able to detect the direction from which sounds come, a most important and essential attribute for submarine communication.

"Mr. J. D. Macdonald has succeeded Fraser in the deputy keepership of zoology. Macdonald has worked in the field of ornithology for many years and has made notable contributions to the ornithology of the Southern Sudan and Southwest Africa. He has been in charge of the bird room at the Museum since 1944."

PUBLISHED IN JANUARY

Smithsonian Miscellaneous Collections:

"A New Theory on Columbus's Voyage through the Panama Canal," by Edwin A. Link and Marion C. Link; 45 pages, 5 plates, 2 charts.


Smithsonian Contributions to Astrophysics: "Distribution of Meteoric Debris About the Arizona Meteorite Crater," by John S. Rinehart; 16 pages, 9 text figures.

Reports: "Report of the Secretary of the Executive Committee of the Board of Regents for the Year Ended June 30, 1957;" 204 pages, 9 plates.

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