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.

Dr. Mahler recently returned from a year's travel in Turkey, Afghanistan, Pakistan, 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.

The excavations made by Dr. Young and his colleagues at Gordion have now reached a level dating from the eight 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 received the barbarian (Cimmerian) invasion.

STRINGING US ALONG

The Office of the Registrar recently received an envelope addressed to 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
I always feel when UIC
I used to rave of LHN's eyes
4 LC I gave countless sighs
4 KEP, E, and LHR
I was a keen competitor
But each now's a non-CHT
4 U XCL them all UG.

LECTURE ON ARCHAEOLOGY

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 received the barbarian (Cimmerian) invasion.

LECTURE ON ARCHEOLOGY

"The skull of a man before man," they lived in the Near East at least 45,000 years ago was shown Regency of the Smithonian Institution, headed by Chief Justice Earl Warren at their annual meeting held 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, curator of physical archeology, 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 not a Neanderthal, but about 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. Naqi al Asli, 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 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 falked-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, hundreds of 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 specimen.

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 into shattered pieces, 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 International Scientific Federation 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. Stamer, 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 casque, 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 Dhabis, 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-tail 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 R. 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.

SKELETAL AGE REPORT

The Quartermaster Research and Development Command, Environmental Protection Research Division, Dayton, 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 North 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.

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 109 Arts and Industries Building.

Members located in the Smithsonian Building and Freer Gallery of Art will continue to make payments to Mrs. Betty J. Morgan, Room 124, E1 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.

NO INDISPENSABLE MAN

SOMETIME WHEN YOU’RE FEELING IMPORTANT
SOMETIME WHEN YOUR ZOO’S IN BLOOM
SOMETIME WHEN YOU TAKE IT FOR GRANTED YOU’RE THE BEST QUALIFIED IN THE ROOM
SOMETIMES WHEN YOU THINK YOUR GOING WOULD LEAVE AN UNFILLABLE HOLE
JUST FOLLOW THIS SIMPLE INSTRUCTION AND SEE HOW IT BRIGHTENS YOUR SOUL:
TAKE A BUCKET AND FILL IT WITH WATER
PUT YOUR HAND IN IT—UP TO THE WRIST
FILL IT OUT, AND THE HOLE THAT’S REMAINING IS A MEASURE OF HOW YOU’LL BE MISSED. YOU MAY MAINTAIN 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 STRANGE 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 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 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 B.I. Christmas tree—for only one or two of the British carols were familiar."
Many had the same words, but all had strange, but rather pretty tunes. I had an invitation for Christmas and Boxing Day at the home of the family of my friends. Christmas here consists of eating. Babies have a 4-hour feeding schedule at Christmas. There are no hick towns; but most of the students are on a 2-hour schedule at Christmas. There is nothing else to do.

Tractically everything is closed on the 25th. On the 27th things began to revive, with some of the stores opening again, this time to the other side of the rail road station here is London too 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—cooking in the pantries on each floor is still possible.)

I have done a bit of sightseeing on 'Montezuma'. Sunday afternoon after Christmas I went out to Iffley, which used to be a village, but now it is 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 the additions later to 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 Witney, about 13 miles away. Witney 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 afternoon exploring London and seeing some of the things I have read about. I was staying at the Society for Visiting Scientists, near Picadilly Circus, so I walked down Regent Street looking at the stores and had my first look at Picadilly. 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. "I was at the American Embassy at 2 to register, so I had to hurry back to Grosvener Square. I hadn't realized how much I had missed our flag—Constitution Avenue has so many special exhibits.

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 Natural History Building and will continue through February 16. "I was at the Smithsonian's Original Collection of Fine Arts, and Jacob Kainen, curator of graphic arts.

NEW APPOINTMENTS;

Executive Officer: Vaughn Harmon (APO)
Observers: Hervyn G. Utter (APO)
Robert C. Thomas (APO)
Charles F. Casper, Jr. (APO)
George J. Basalis (APO)
Computers: Dorik V. equivalence (APO)
Exhibits Technician: John G. Lingebach (Office of Exhibits)
Exhibits Worker: Kurt F. Hauschild (Geology)
Draftsmen: Donald T. Tracy (APO)
Clerks: Gerhard B. Deuhs (EMS)
Librarians: Charles G. Berger (Library)
Juliette S. Bevis (Library)
Library Assistant: Charles H. Moore, Jr. (APO)
Science Advisory: William N. Cogswell, Jr. (R&D)
Physical Science Advisory: Charles H. Moore, Jr. (APO)
Engineering Aid: William R. Allen (R&D)
Clarence W. Johnson (R&D)
Peter Stone (Ethnology)
Administrative Officer: Donald F. Bulles (APO)
Administrative Assistant: Helen M. Hogan (NCFA)
Administrative Clerk: Raymond K. Wau (APO)
Senior Clerks: Willington J. Enelow (BSIE)
Paul E. Cooke (BSIE)
File Clerk: David C. Lyman (BSIE)
Time, Leave and Payroll Clerk: Sue F. Eron (Fiscal)
Bindery Worker: Eddie D. Dent (Library)
Clerk-Slouchers: Isadore G. Meltzer (Office of Planning Officer)
Sylvia L. Boyd (APO)
Lois L. 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)
BRUSSELS FAIR EXHIBIT

The Smithsonian Traveling Exhibition Service's exhibition of "American Folk Art" to be shown in the United States Pavilion at the Brussels World's Fair, opening in April, will demonstrate America's rich heritage in the popular arts.

The earliest item in the exhibition is a charming 17th century "Portrait of Margaret Gibbs" by an unknown artist, while the latest is a painting in oil showing "John Brown Going to His Hanging," dated 1942. No living artists are included.

Approximately 70 carefully selected paintings and sculptures, many by anonymous artists, stress life in America in the 18th and 19th 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, London, and Paris, under the auspices of the American 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, 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 less 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: Mr. and Mrs. Henry Bowers, Mrs. David W. Gilman, Mr. and Mrs. Elias E. Gray, IV, Mrs. Edith Halpert, Miss Ethel M. Howell, Mrs. Maxim H. Lemberg, Charles W. Tohey, 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 portraits, of all types, ranging from distinguished personalities and beguiling children. Among the former are the outstanding likenesses of Captain and Mrs. Samuel Chandler (c. 1780) by Minthropp Chandler, Mr. and Mrs. Pearce (c. 1835) by William Matthew Prior, and the extraordinary self-portrait—the only one in the show—by John Kane painted in 1859. Several children's portraits by Anne Fields, notably the famous "Baby in Red Chair" (1800-1825), the "Baby in Blue Cradle" (c. 1830) the "Twins Sisters" (c. 1840), of the "Little Boy Holding Watch" (1802).

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

The exhibition would not be complete without a number of delightful still-life paintings in oil and watercolor. Among landscapes from many parts of the country, Chamber's "Niagara Falls" (mid-19th century), W. C. Sharon's "Western Landscape" (34 quarter 19th century), Hicks's "Cornell Farm" (c. 1848), and Pickett's "Cornell's Ferry" (c. 1914-1918) are among the best, deserving of special mention. The 19th-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" (1845) 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.

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 fame,
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.

So let this be our resolution:
With both of us so free.
I won't talk about you
And you won't talk about me.

—William H. Lewis, BMS

RETURN 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 a 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, where he saw Dr. MusaTeff Sendlerek, of Ankara University, who had studied the Shanidar infant recovered in 1953 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 Musée de l'Homme and of the Institut de Paléontologie 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 Rhodan skeleton. In a side trip from London Dr. Stewart called on Sir Wilfred le Gros Clark and Prof. J. E. Knechtel, and a week later Dr. Stewart also saw Miss Lucile Hoyme, who is on educational leave from the division of physical anthropology.

The secret of success is constancy of purpose.

I don't intend to broadcast yours,
So please don't broadcast mine.
RUSSIAN SCIENTIST VISITS

Dr. G. F. Debes, 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. Debes announced that this experience would remain one of the high-points of his visit to America.

Dr. Debes came here from New York, where he has been working on Eskimo 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. Cohn, chief of the editorial and publications division and public relations officer, who was re-elected secretary; and Herbert G. Daigman, 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 H. 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 cycles.

Throughout history astronomers have held various other theories--for example, that they were "holes" in the hologram, 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 are associated with 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 unsolved problems associated with the sun's outer atmosphere, Dr. Menzel points out in this report. For example, the shining surface of the sun, the part unaffected by sunspots, is by no means uniformly bright. It contains many bright flocks on a slightly darker background--"spots that look like foam-capped waves on a stormy sea." These generally are smaller than 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 layers of plasma that form extremely complex 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 opaque to the spot, 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 30 per cent of the present value.

Still just as much heat as ever would be produced in the sun's interior, but it would require about 50 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 playing a key role in the satellite tracking programs. Will you therefore convey to Dr. Fred L. Whipple, Dr. J. Allen Hynek, Dr. Armand N. Spitz, and to all their associates and assistants, this message of congratulations from the President."

RIDES WANTED

Mrs. Moya Lerner, in the Natural History Building, wants a one-way fare from 5:15 p.m. until 7:15 p.m. to the 7100 block of 13th Avenue, Takoma Park, Md. This address is off New Hampshire Avenue extended and Brant Street, going into Langley Park. Please telephone Ext. 253.

Ride wanted from County Service Building, Hyattsville, Maryland to Smithsonian Institution and return by two employees. Call Mrs. Flood, Ext. 843 or Mrs. Quail, Ext. 341.
S. I. COMMENDED 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 Institute in the Blood Program. The number of donors appearing during the past year must be gratifying to you as it is to us. We have been informed that this 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, 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 with 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. Gruenther."

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

MOONWATCH NEWS

According to a newsletter dated February 3, the first three sightings of the U.S. satellite "Explorer" reported to Moonwatch headquarters 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.

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 the agencies' programs. With full cooperation we feel certain that we will surpass last year's fine record.

CREDIT UNION DECLARES DIVIDEND

A dividend of 4 percent was voted by the members of the Smithsonian Credit Union at the annual meeting held on 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 McGain
- Mrs. Eileen M. McCarthy
- Mrs. Margarette W. Poole
- Dr. W. L. Schmitt
- Capt. William B. Stiles

Credit Committee:
- Mrs. Norma Jean Baker
- Dr. George E. Cornell
- James M. Derrow
- Burton E. Gilbard
- Cornelius G. Johnson
- Miss Lucile McGain
- E. L. Roy

GROUP LIFE INSURANCE PAYS

Mr. Paul Burroughs, an exhibits worker, had been employed by the Smithsonian Institution less than a year when he died. He had the foresight to subscribe to Federal Employees Group Life Insurance although he failed to inform his wife of this fact.

Recently the Smithsonian received the following letter from Mrs. Burroughs which points out the value of this low-cost protection:

"On last Friday, I received a check from the Federal Employee's Group Life Insurance Company, and needless to say I was surprised and pleased.

"I'm sure that Paul never realized that he would be eligible for any benefits, so it comes as a lifesaver to me. So I wanted to express my thanks to someone. Very Sincerely yours, Ann A. Burroughs."

STAMP HONORS APO

An O.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, Maas-\000\000\00000001enburg" 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. W. G. H. Bervossen. A total of 300,000 of these stamps was produced.
During December and January, the professional staff of the Missouri Basin Project began a concerted effort on a Chronology Program. This coordinated program will cover the entire time span of man's presence in the Missouri Basin. It will encompass every one of the cultural units that can be distinguished in the area and it will utilize every available chronological technique which might be applicable to any or all of the problems involved. It will mean coordination of dendrochronology, carbon-14 tests, geologic-climatic techniques, ceramic analyses, cross-cultural methods, use of proportional counters, trace mineral analyses, and other techniques.

Dr. Robert L. Stephenson, chief of the Missouri Basin Project, spent the week of January 19 in Washington, D. C., where he conferred with Dr. Frank H. H. Roberts, Jr., Director of the Bureau of American Ethnology, and attended the meetings, and the selection of the Recovery of Archeological Remains on January 22 and 23.

G. Robert Smith, archivist, left Lincoln in December for Baltimore, Maryland, where he will have charge of archeological excavations and research at Fort Mchenry National Monument. Mr. Smith replaced the Missouri Basin Project to the National Park Service. The uppermost problem with which he will deal is that of locating Fort Whetstone, the predecessor of Fort McHenry.

The 75th (Diamond) Anniversary of the Civil Service Act culminated in Lincoln, in a banquet at Colon Terrace on the evening of January 16. The group attending, from all federal agencies in the city, totaled nearly 300.

Dr. Warren Caldwell of the Missouri Basin Project staff served as a member of the Publicity Committee for the celebration, and Mrs. Olive Powell, also of the Missouri Basin Project staff, served on the Banquet Committee.

RIVER BASIN NEWS

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 recently 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 into the Museum the principle that species are populations in nature which not only vary in time and 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 dolphins. Recently, 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:

Smithsonian Miscellaneous Collections: "A New Theory on Columbus's Voyage through the Bahamas," by Alfred R. Loeblich, Jr.; 43 pages, 1 plate.


"New Neotropical Waes of the Family Braconidae (Hymenoptera) in the Panama Canal Zone," by F. W. Musebeck; 56 pages, 4 text figures.

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


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