

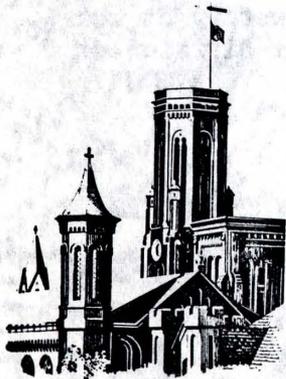
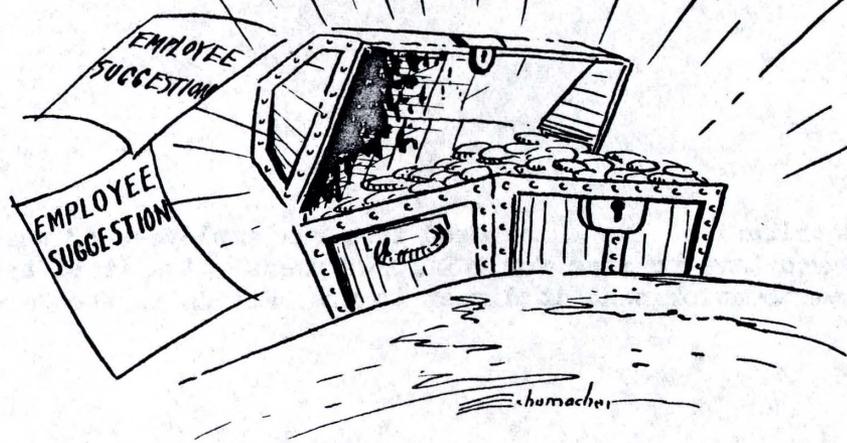


January 1957

THE SMITHSONIAN
TORCH



Why not Try For This JACKPOT!



SMITHSONIAN INSTITUTION • WASHINGTON, D. C.

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Contributions are encouraged from all employees of the Smithsonian Institution. If you have an item for THE TORCH please give it to the secretary of your department or send it direct to Mrs. Fields in the Personnel Division.

CONTRIBUTIONS SHOULD BE RECEIVED BY THE LAST DAY OF THE MONTH.

OKAPIS AND SEA SNAKES

A pair of okapis (*Okapia johnstoni*) were recently put on exhibit at the National Zoological Park. These rare and beautiful antelopes were gifts from the Belgian Government. They had been flown from the Belgian Congo to Hanover, Germany, for two months quarantine, and then to the Quarantine Station at Athenia, N. J., for another 30 days.

They were formally presented to the Zoological Park by Baron Leopold Dhanis, Counselor of the Belgian Embassy, and accepted on behalf of the Smithsonian by Dr. Carmichael.

The okapis were unknown to zoologists until 1901, when a skin and

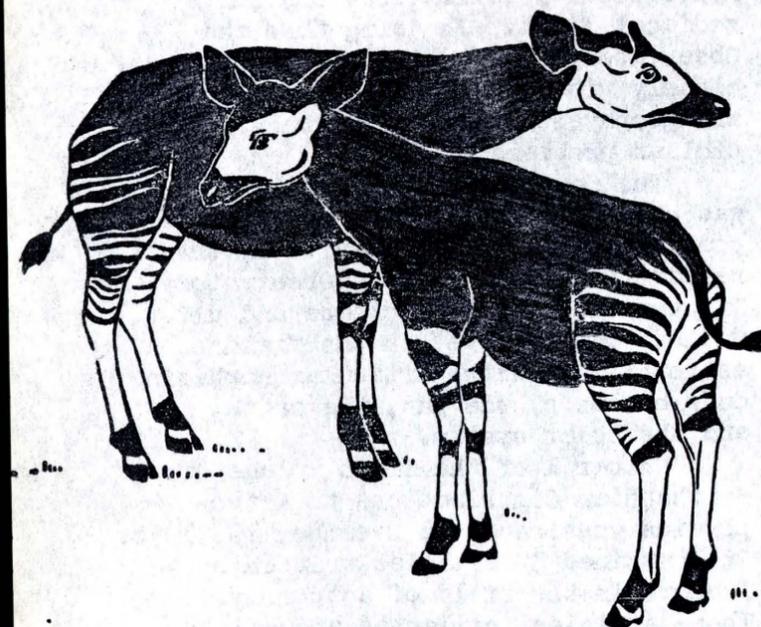
two skulls were collected by Sir Harry Johnston and sent by him to London, where it was determined that this was a new species. The first to come to the United States was a single specimen for the New York Zoological Society in 1937. There are now eight specimens in various American zoos.

The okapi has been described as having the head of a giraffe, the neck of a horse, the eyes and ears of a donkey, an elk-like body, and the striped legs of a zebra. It belongs to the giraffe family, although its legs and neck are not nearly as elongated as those of its better-known relative. The arrival of a pair here climaxed an 8-year search for a pair for the National Zoological Park.

Another recent and interesting addition to the Zoo's collection is a group of broad-tailed banded sea snakes from the Palau Islands in the South Pacific. They were obtained through the courtesy of Dr. Frederick M. Bayer of the National Museum's division of marine invertebrates.

Although they are common in their native haunts, ranging from southern Japan to Australia, the Bay of Bengal and the South Pacific Islands, they are rarely seen in captivity because of the difficulty of keeping them alive. The Zoo is experimenting with a new method of exhibiting them; instead of keeping them in a tank, they are on dry land with a pool to bathe in. This is being tried because in nature they spend a great deal of time out of the water, only returning to the ocean at night to feed. They are known to eat eels, and probably take other fish as well.

Sea snakes are related to the cobras and are poisonous, but are not particularly aggressive. They are long, slender snakes with black and white bands that resemble prison stripes. The tip of the



Okapis. Drawing by Brenda Sladen.

tail is flattened and serves as a propeller when swimming.

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RECUPERATING

Mrs. Madeline Fineannon, Chief, Classification Section, Personnel Division is on the mend after major surgery. Her colleagues are eagerly awaiting her return early in February.

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"It is easier to do a job right than to explain why you didn't."

--Martin Van Buren

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SEMINOLE MUSIC

The Bureau of American Ethnology has just issued a bulletin entitled "Seminole Music," by Frances Densmore, noted authority on Indian music. In addition to the 243 music scores of the ritual and social songs and dances that are such an important part of the culture of these Indians of the Florida Everglades, the book contains a short history of the Seminole, an account of their customs and beliefs today, and some of their stories and legends.

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ADDRESSES SPELEOLOGISTS

On January 3 Mr. James H. Benn gave an illustrated talk on the "Caves at Cacahuamilpa, Mexico," before the Washington Grotto of the National Speleological Society in the Georgetown Library.

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CONTRIBUTIONS TO ASTROPHYSICS

The Smithsonian Institution inaugurated a new series of publications in December when it published number 1, volume 1, of Smithsonian Contributions to Astrophysics.

With scientific headquarters in Cambridge, Mass., under the direction of Fred H. Whipple, the Astrophysical Observatory has broadened the scope of its studies of solar phenomena and atmospheric effects to include related phenomena such as meteorites, hypervelocity ballistics, and the zodiacal light. In doing this the Observatory's scientists are working closely with other astrophysicists and geophysicists who are studying similar problems.

The new publication series was created in order to provide proper communication for the results of the research conducted at the Observatory. Its purpose is the "increase and diffusion of knowledge" in the field of astrophysics, with particular emphasis on problems of the sun, the earth, and the solar system.

Number 1 of the first volume of Smithsonian Contributions to Astrophysics was issued on December 19, 1956. It contained 39 articles written by 42 leaders in the field of astronomy. These articles, collected and edited by Dr. Whipple, appeared as "New Horizons in Astronomy." The publication of these papers was supported

jointly by the Smithsonian Institution and the National Science Foundation. The new series was designed and edited by the staff of the editorial and publications division.

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RIVER BASIN NEWS

The Fourteenth Plains Conference for Archeology was held in Lincoln, Nebraska, over the Thanksgiving holidays. The Missouri Basin Project of the River Basin Surveys participated in the meetings in several ways, with several staff members presenting papers. On Saturday, November 24, the Project held "Open House," and approximately 25 of the professional people attending the Conference visited the laboratory. Richard Wheeler, archeologist on the staff of the Missouri Basin Project, was chairman of the meetings.

Dr. Frank H. H. Roberts, Jr., Director of River Basin Surveys, was in attendance at the Conference and presided at one of the sessions. He remained in Lincoln for a few days following the meetings to go over plans for the coming year with Dr. Robert L. Stephenson, Chief of the Missouri Basin Project.

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NEW STOCK CATALOG

The supply division has issued a revised edition of the stock catalog. Any office that has not received a copy should contact the division.

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NAM GETS MODEL OF HISTORIC PLANE

A scale model of James Christian Ellehammer's airplane of 1906 was given to the National Air Museum last month.

The Ambassador of Denmark, Henrik Kauffman, presented the model to Dr. Carmichael on behalf of The Royal Danish Aero Club. The ceremony, which took place on December 11, was attended by officials of the Smithsonian and a number of aeronautical personages.

The boyhood career of James Ellehammer, who was born the same year as Orville Wright, in 1871, paralleled the boyhood careers of our own famous Wright brothers. They were all interested in kites, model airplanes, and cycling.

But Ellehammer did not practice gliding, as did the Wrights, for an introduction to flying. Instead, at the beginning of the century, he designed and constructed a 9-horsepower, air-cooled engine and installed it in his airplane. The design of the airplane was based upon that of his diamond-shaped kites.

By the summer of 1906 his craft was ready for tests and, following a number of short hops, he took off on September 12 for a 138-foot flight at an altitude of about a foot and a half.

In the following years, Ellehammer improved both his engines and his aircraft. In 1908 he was credited with making the first heavier-than-air flight in Germany; and his monoplane of 1909, powered by his 6-cylinder engine of about 40 horsepower, flew repeatedly with good performance. In 1912 he experimented briefly with helicopters.

Lack of financial support limited his further efforts in aeronautics, but he continued to be active in other fields of science, producing many practical developments in electricity, photography, and power, for which he was granted more than 400 patents.

The model presented to the Air Museum is constructed to a scale of about 1:12. Having a span of about 30 inches, it illustrates a triangular-winged, 3-wheeled aircraft, with an additional double-arched surface above

its wing, powered by a 3-cylinder radial engine driving a frontal propeller. The model is on exhibit in the Aeronautical Hall of the Arts and Industries Building.

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DEAR OLD S.I., WE LOVE YOU

Let us Peal a mighty Anthem,
Ring it up the silent hills;
Hear the words as out we pant them,
Slightly crimson 'round the gills.

Life is Real, and Life is Sometimes,
And at others, just a Boast;
But more often, not at all times,
It is truly more than most.

Let this sentence be our motto--
Life today is frequently:
Here today, and gone Tomorrow,
For the next one we may Be.

Chorus

Dear Old Ess-Eye we do;
The any of our Hearts is you.
So produce the brimming cup,
The which that we may drain it Up--
On the Record, We Love YOU.

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BECOMES HONORARY RESEARCH ASSOCIATE

One of the unique features of the National Museum is the close association of scientists from different bureaus, so stationed that they can be close to the collections. Such a grouping has long existed between the Museum and the U. S. Geological Survey. So close does this union become that it may be said of some of the men that they belong to both organizations. This is certainly true of Dr. C. Wythe Cooke, who, in retiring from the Geological Survey after 47 years, is in reality, we hope, thereby beginning

a happy and profitable career as a member of the Museum staff.

Dr. Cooke joined the Geological Survey in 1910 in a temporary capacity while still a student at The Johns Hopkins University. After graduating with a Ph.D. degree in 1912, Dr. Cooke became a permanent member of the Survey and, since that time, has been associated with the Survey group located in the National Museum. Dr. Cooke has been a prolific worker and has written more than 90 papers describing fossils, and Mesozoic and Tertiary strata of the American coastal plain from New Jersey to Mississippi. He also described land forms and sedimentation phenomena in the same region. In addition to these, he made studies for the Geological Survey in the Dominican Republic and Puerto Rico.

Of late years Dr. Cooke has been devoted to his studies of the echinoids, or sea-urchins, which are found in some abundance in parts of the coastal plain sediments, and sediments of the same geological ages in the West Indies and elsewhere. Since his voluntary retirement from the Geological Survey last November 30, Dr. Cooke is devoting much of his time to continuing his echinoid studies as an Honorary Research Associate in the National Museum.

In a letter of thanks for a pleasant farewell party in his honor on November 30, Dr. Cooke expressed in these words his past and future relationship:

"I would feel more regret at severing my connection of 47 years with the Survey were I to have to bid you all farewell. However, my former family have become my neighbors and the neighbors have become my family, for the neighbor across the Mall has adopted me as a Research Associate of the Smithsonian Institution. Since August, when the appointment became effective, I have been leading a double life -- a kind of bigamy."

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ARSONOUS ANTOINETTE

Antoinette Redd
Loved smoking in bed
E'er she went to sleep for the
night;
She'd tuck herself in
Like a screen heroine,
And languidly reach for a light.

One night Antoinette
Lit her last cigarette...
It was much, much too late when
she woke;
She was sheeted in flame,
And though she yelled loud his
name,
No hero rushed her out through
the smoke.

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NEW SEMESTER

Catalogs of courses for the spring semester at the Department of Agriculture Graduate School, the Y.W.C.A., and local colleges are available in the personnel division. Come over and help yourself.

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LOVERS BEWARE

Once upon a time there was an official of the Smithsonian Institution who planned a honeymoon. Thinking to impress the manager of the resort hotel to which he planned to take his bride, this official used Smithsonian stationery in writing his request for the reservation and enclosing a deposit.

In due time the groom-to-be received a polite reply thanking him for selecting that particular hostelry

and agreeing that it would have provided a most beautiful place for the honeymoon. The check was returned, however, with the explanation that the policies of that hotel were based upon providing rest and relaxation for their guests and, therefore, they did not accept persons from institutions.

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YOURS TRULY . . .

A recent edition of "Office Girls" published by Vision Incorporated, has the following advice for letter writers:

Could you compose letters as good as the ones that are dictated to you, if you ever get a chance? Of course, you'll say. Better!

. Hold on now. You may get the chance, or you may be able to make the chance. But whether or not your letters will be as good or better is another matter. There's a long distance between thinking and doing.

. Here are some suggestions for writing letters that you can show the boss with confidence and sign with pride.

. Decide beforehand what you want to say. Jot down all the points you want to get across, then arrange them in order. This can be the order of their importance ---to the reader, of course; or the order in which one point leads naturally into the next.

. Say what you have to say on one point, tie up all its loose ends, then move on to the next. Skipping backwards and forwards because you forgot to include something confuses the reader no end. That's why even those people who are most experienced at putting words on paper type up a rough draft of an important letter first. The final job comes only when that draft has been thoroughly worked over.

. Don't write as you ordinarily talk, or you'll be repeating yourself, interrupting yourself and just plain rambling, but don't write anything you wouldn't be

likely to say. That's a vastly different matter. Using this double test insures your letters against being burdened by such verbal bric-a-brac as "It's to be regretted that an inadvertent error was committed," "Trusting this meets with your approval," "Please to be advise," and like fossils.

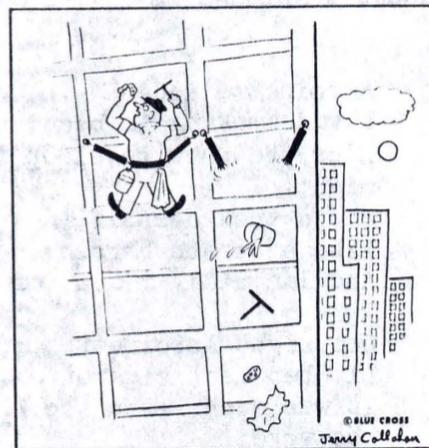
Splitting an infinitive won't do either you or the infinitive any permanent harm. Nor will ending a sentence with a preposition. Winston Churchill once submitted to the appropriate Ministry the text of a speech he was about to deliver. Some persnickety official crossed out a sentence which ended with a preposition and rephrased it so that the preposition no longer came at the end. This aroused the famous Churchill wrath. Back the speech went to the culprit with this notation in the margin: "This is the type of arrant pedantry up with which I will not put."

Don't be afraid to be colloquial in other ways, even at the expense of absolute grammatical purity. On the other hand, don't confuse colloquial usage with slang, which is not acceptable in a letter. If you're not sure about the difference, ask somebody who is.

Don't go overboard on short sentences. A whole unrelieved series of them gives a machine-gun effect. Best for reader comfort, both visual and mental, is a tasteful variety of sentence lengths.

You can't judge a word by the number of letters in it. Short words are not always better than long ones. Choose familiar words, and words that really mean what you want to say. And skip the technical jargon. "\$6.50-1M" may be fine if you're writing to an experienced purchasing agent. Other readers may not know that 1M means 1,000. Also skip the meaningless verbal irritants such as "That is to say," "In other words," "By the same token," and so forth.

Final test. If you had to read your letter to the recipient over the phone instead of mailing it to him, could you read it without embarrassment?



"Well, speak up, Harry, what were you saying about Blue Cross being for sissies?"

INCENTIVE AWARDS-1957

It is the hope of the Incentive Awards Committee that 1957 will see a record number of awards granted employees of the Smithsonian Institution.

There are many opportunities for earning awards, such as safe short cuts, eliminating unnecessary paper work, better tools for the particular job, better ways of doing a job, safer working conditions, and sustained superior performance.

Put your ideas on paper, in your own words, and send it to the Chairman, Incentive Awards Committee, through your supervisor or direct to Dr. Jason Swallen, Chairman of the Committee.

While you may not collect on every suggestion, the more you send in the better your chances will be.

Use your ideas, it's your privilege.

Increase efficiency.

Improve economy.

Promote greater production.

JINGLE BELLS

Christmas 1956 was celebrated by the Smithsonian with its traditional party, held on December 20 in the Great Hall. Superintendent Oliver and his associates had chosen one of the finest evergreens at the Suitland area for the Christmas tree, and they decorated it most attractively.

In his welcoming remarks, Dr. Carmichael reminded us of the fortunate position held by our nation in this troubled world and recalled the several ways in which the Smithsonian had progressed during the year, particularly through the Congressional action and appropriation for the new Museum of History and Technology. Other evidences of our progress to which he referred are the improvements in our exhibition halls and additions to our personnel.

In our caroling we expressed the wish that all peoples of the earth might share our happiness as we sang "Joy to the World" and then we made the vaulted Smithsonian arches echo with "Deck the Halls with Boughs of Holly" and "Oh Come All Ye Faithful."

Dr. Carmichael next announced that Paul Garber, who had been leading our singing (He's a regular bird because he both sings and flies) was to give an original poem, but our spies have since learned that shortly before he was to go on the air, so to speak, his original poem had been censored. So, instead, he recited "Our Whippings" by Eugene Field, which is a humorous recollection of childhood's complexities with resulting curative action. Maybe we will hear the original "Poem of Paul" next Christmas.

More singing followed, concluding with "Silent Night," and seldom, if ever, has our venerable hall heard such excellent group singing as when we combined our voices in that ancient song.

Although we see each other at various times throughout the year as we come and go from building to building, the Christmas party provides a glorious occasion whereby we get to know one another better, to grasp hands a bit firmer as we greet old friends and reach out to welcome new ones.

Cookies, coffee, peanuts, and punch served to lubricate our conversation as we passed along the refreshment table. By 5:30 the Great Hall was quiet again.

DO YOU HAVE THEM?

The following copies of a periodical titled Industrial Design apparently are in circulation and it would be appreciated if they were returned to the Office of Exhibits as soon as possible: 1954, No. 3; 1955, No. 3; and 1956, No. 3.

ARCHEOLOGICAL LECTURE

An illustrated lecture by Dr. George E. Mylonus of Washington University, St. Louis, on "Grave Circles of Mycenae" will be presented in the auditorium of the Natural History Building on February 6.

The lecture is under the joint auspices of the Smithsonian Institution and the Archaeological Institute of America.

Dr. Mylonus, who was elected president of the Archaeological Institute of America last month, has done considerable excavation work at Mycenae, one of the most ancient cities of Greece.

Mycenae, at one time, was the center of the prehistoric Aegean Civilization. The existence of this civilization was

first disclosed in 1876 when Heinrich Schliemann exposed the contents of graves and made known the advanced stage of art attained by the prehistoric dwellers there.

All members of the Smithsonian staff and their friends are invited to attend.

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ASSISTANT ZOO DIRECTOR RETIRES

Mr. Ernest P. Walker, Assistant Director of the National Zoological Park for 26 years, retired on December 31, 1956. He has been in the government service for 31 years, starting his career in the Biological Survey which was later changed to Fish & Wildlife. Mr. Walker's early work was in wildlife refuges with extensive field work in Alaska. Much of his time has been devoted to the care and feeding of numerous small mammals and he has developed, through personal contact, diets and methods of exhibition for these animals. Also, he devoted a great deal of time to photographing rare and unusual creatures. He has published numerous articles on small mammals and written a book on monkeys called "Monkey Book." He retired in order to devote full time to his writing.

On December 28, 1956, his many friends from the Smithsonian Institution and the National Zoological Park held a farewell reception for him at the National Zoological Park cafeteria. He was presented with a beautiful brief case inscribed with his initials. In addition, he was presented with a \$50 savings bond. Mrs. Walker was given a bouquet of red roses, one for each year that she had aided her husband in his work. The Secretary, Dr. Carmichael, in recognition of Mr. Walker's outstanding knowledge of devoted service to the animals and to the Smithsonian Institution, gave him an honorary appointment as Collaborator.

In his letter of appointment, Dr. Carmichael said on behalf of the

Smithsonian Institution, "It is our sincere wish that you will enjoy your retirement and have many productive years ahead in which to pursue your interests in zoology and to continue your fine contributions to this important area of science."

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NEW CITIZEN

Dr. Chao Chi Moh of the division of radiation and organisms became an American citizen last month. He was one of 101 new American citizens sworn in at the Federal Court House in Alexandria on December 12. The staff members of the division honored Dr. Moh at a luncheon at the Water Gate Inn on that day.

Dr. Moh has officially adopted the American name of Carl Craig Moh.

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RIDE WANTED

To and from the vicinity of Courthouse Road and Wilson or Arlington Boulevards. Please call Mrs. Knott on 341 or 344.

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EXHIBIT BY PRINTMAKERS

The National Collection of Fine Arts has announced the opening on January 6 of the 21st Exhibition of the Society of Washington Printmakers. The exhibition, located in the foyer of the Natural History Building, will continue through January 27.

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AWARDED DANISH MEDAL

James Zetek, the retired Resident Naturalist of the Smithsonian's Canal Zone Biological Area, Barro Colorado Island, has been awarded the Galathea 1950-52 Medal. This award was bestowed upon Mr. Zetek on behalf of the Danish Government by Wladimir Ishoy, Consul General of Denmark.

The Galathea 1950-52 Medal commemorates the Danish corvette "Galathea," which circumnavigated the globe in 1845-47 in the pursuit of scientific, political, and economic objectives.

On October 15, 1950, a second "Galathea" sailed from Copenhagen on another round-the-world expedition. On board were scientists from Denmark, Sweden, and the United States. During this 21-month trip of the "Galathea," these men were joined by representative scientists from South Africa, India, Siam, the Philippines, Australia, and the United States. The objective of this expedition was "...the purely scientific problem of throwing light on the fauna of the greatest ocean depths, and their living conditions, and 'inter alia' seeking to answer the question whether there is any life at all in depths with an atmospheric pressure of more than 1,000."

This oceanographical and marine-biological round-the-world expedition of the "Galathea" was accomplished with many satisfactory results for the world in general and the Danes in particular. The Royal Danish Government wished to thank those who cooperated to make this deep sea expedition a success. Thus in August of 1955, King Frederik IX of Denmark instituted a silver medal named "Galathea 1950-52," whereupon His Majesty "has designed to bestow the medal to a number of persons in appreciation of meritorious work in connection with the 'Galathea' expedition in question."

Mr. Zetek merited this distinction because of advice and information given to the "Galathea" group during the ship's stay in the Canal Zone waters, Balboa being one of 66 ports where the "Galathea" docked. Mr. Zetek is one of a very few outside the main expeditionary force on board who was so honored. We congratulate him.

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METEORITE CRATER STUDIED

The great shooting star that plunged to earth thousands of years ago and dug the famous Arizona Meteorite Crater weighed at least 12,000 tons and approached from a direction slightly south of west. Hitherto it had been estimated that the giant meteorite weighed between 10,000 and 10,000,000 tons, and that it crashed to earth from a point slightly west of north.

These most recent measures of weight and direction are based on an on-the-spot study by a group of Astrophysical Observatory scientists headed by Dr. John S. Rinehart, assistant director of the Observatory. Dr. Rinehart with his family and three Harvard University research students lived on the Arizona Desert near the Crater three months last summer while making the survey.

Direction of the meteorite's flight was determined by sampling earth over an 80-square-mile area for tiny fragments of the meteorite. These particles of metals were found distributed over a symmetrical swath running nearly west to east (actually 15 degrees north of east). Samples were taken every half mile in a square pattern, and sifted by screen and magnetic separator. Particles adhering to the magnet were all strongly magnetic and mainly in three categories: a meteoric iron particle, a meteoric iron-oxide bit, and a shiny particle, probably volcanic.

From the area immediately surrounding the crater--which is 4,100 feet in diameter and about 600 feet deep--the scientists sampled earth that contained a concentration of meteorite particles. The weight of these particles, taking into consideration the area over which they were collected, constituted the basis for estimating the 12,000-ton weight of the meteorite.

Dr. Rinehart points out that a ballistics estimate previously made determined that the missile would have had to weigh 12,000 tons to have made a crater of the dimensions of the one in Arizona.

His report on the survey states that there is no evidence to indicate any sizable portion of the meteorite lies under the floor of the crater. The meteor apparently exploded on impact, scattering into bits and chunks. The larger pieces remain now as particles, and the original smaller pieces have undoubtedly disintegrated through oxidation since the meteor fell thousands of years ago. The time is estimated variously at from 5000 to 50,000 years ago.

The crater expedition was partly financed by U. S. Air Force funds.

Members of Dr. Rinehart's research team on the Arizona survey were Nicholas Matalas of Charlotte, N. C., Robert O'Neil of Cambridge, Mass., and Robert Olson of San Jose, Calif. Plans for the expedition and analysis of the results were done by F. Behn Riggs of Cambridge, Mass., and Paul Hodge of Snohomish, Wash.

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74th ANNIVERSARY OF CIVIL SERVICE ACT

The week of January 13-19, 1957, has been marked for observance of the 74th birthday of the civil service system. It was on January 16, 1883, that President Chester A. Arthur signed the Civil Service Act.

This day established the principle that those persons privileged to serve the American people in Government career

posts should be selected on the basis of merit. It created the Civil Service Commission to "regulate and improve the Civil Service of the United States." When the act was signed, it covered approximately 13,900 jobs. Today more than two million Federal employees work under an equitable merit system made possible by this law.

Here is the interesting story of the development of the Civil Service Act.

The Civil Service Act, signed into law on January 16, 1883, has stood for seventy-four years as the cornerstone of the American civil-service system. It established the framework for a personnel system under which today over two million employees work for the American people.

In general, our earliest Presidents made appointments to public office on a basis of qualifications. But for approximately a half century prior to 1883, the slogan "To the victor belong the spoils" was the accepted principle in filling Government jobs. The spoils system reached such proportions that in 1841, when William Henry Harrison took office as President, 30,000 to 40,000 office seekers swarmed into the capital city to claim the 23,700 jobs that made up the Federal executive service of that day.

By 1853 it had become the custom to stop all regular activities for a month after a change of administration to allow the President and heads of departments to devote time to settling the multitudinous and conflicting claims of the spoilsmen.

Lincoln Takes Office

However, during the Civil War a vigorous movement was begun to increase the efficiency of the Federal service by changing the method of appointment.

Foremost in this movement was Representative Thomas Allen Jenckes of Rhode Island. Convinced of the need for competitive examinations and nonpolitical appointments, he

introduced bills repeatedly to carry out his convictions. Although his bills were defeated, Jenckes' studies furnished valuable material for reform advocated for the next fifteen years.

After President Lincoln's second election, although advocates of rotation of office were pushing for a complete turnover in all offices, Lincoln refused. Thus began the decline of the "rotation theory," the main strength of the spoils system.

Grant Appoints Commission

Elected on a reform platform, including a promise of civil-service improvement, Ulysses S. Grant took office as President in 1871. Heads of two Departments, Interior and Treasury, introduced competitive examinations administratively and Grant appealed to Congress for a law "to govern, not the tenure, but the manner of making appointments." Grant appointed a Civil Service Commission, and in a last-minute rider to an appropriation bill Congress gave him \$25,000 for its operation.

Although the Grant Commission went out of existence in 1875 for lack of funds, it accomplished enough to prove to the country that the merit system was both practical and beneficial.

Public sentiment for civil-service reform continued to grow, in spite of the Grant Commission setback. The climax came on July 2, 1881, when Charles Guiteau, agitated by a patronage dispute, slipped up behind President Garfield in a Washington railroad station and shot him in the back.

The tragedy aroused the American people and resulted in the passage of the Civil Service Act.

Arthur Signs Act

Signed into law on January 16, 1883, by President Chester A. Arthur, the Act has remained basically unchanged.

The Act, framed largely by Dorman B. Eaton, laid down certain principles and aims for the civil

service and left to the President the responsibility for providing the rules and regulations for accomplishing its purposes.

The passage of the Act of 1883 did not spell the end of the civil-service story. For the next 74 years two main threads are evident: the gradual extension of the coverage of the Act until at present 85% of executive-branch positions are covered; and the transformation of the service into a modern, responsive instrument to perform the will of the people in a complex civilization.

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THE DAY OF JANUARY 16, 1883

January 16, 1883, dawned cold and clear in Washington. It was a Cabinet meeting day and every member was in his seat when President Chester A. Arthur entered the room. This was to be the final Cabinet discussion to determine whether the President should sign the civil-service bill.

None of the Cabinet members had to be reminded that civil service had been one of the big issues in the November Congressional elections. Popular indignation over the murder of President James A. Garfield by disappointed office seeker Charles Guiteau hadn't been translated into legislation by the Congress that went out of office in 1882. But the present Congress had put civil-service legislation high on its agenda.

News Play

There was no realization in anyone's mind that some day more than 2 million persons, hired competitively under Federal civil service, would be on the Government payroll. Yet New York's The Tribune and The Sun and Washington's The National Republican, The Star, and The Post put the story of that Cabinet session either on page 1 or on the editorial page -- and the editorial page counted for a great deal in 1883.

Indian Chief

General Grant was in town and had drawn admiring crowds as he strolled along Pennsylvania Avenue. Red Cloud, the Indian Chief who had once terrorized the frontier, was in Washington, too, very bitter about losing the peace, and there was considerable talk about the new ambassador from the Kingdom of the Hawaiian Islands. Congress was debating bigger pensions for veterans of the Mexican War and wondering whether to spend up to 20 million dollars to combat illiteracy in the territories. For the socially minded, "Queen's daughter is in Richmond" screamed one headline. In 1883, "Queen" could only mean Victoria.

The civil-service story was helped that day by someone calling himself "Charles Guiteau the Second." He had threatened to murder the Governor of Massachusetts. And it made news that a brief, last minute hitch developed when Cabinet members began the discussion of the bill.

The bill was signed, however, before the end of the day (January 16) on the testimony of the morning newspapers of January 17, 1883

Times to Come

It's anybody's guess, indeed, how the average man and woman felt and thought that day the civil-service bill was signed, 74 years ago. Certainly no one dreamed that the time would come when every fourth person in Washington would be working under the Federal civil-service system that had been launched that day. Snow was predicted for the next day, but the almanac said spring would come early.

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NEW APPOINTMENTS

Museum Aid:

Albert F. Kunze (Philately)

Photographer:

Jack W. Staff (Zoology)

Systematic Zoologist:

William R. Taylor (Zoology)

Exhibits Worker:

James R. O'Rourke (Off. of Asst. Dir.)

Administrative Clerk:

Eleanor M. Brew (BSIE)

Clerk-Dictating Machine Transcriber:

Marjorie C. Kingsbury (APO)

Clerk-Stenographers:

Carolyn S. Brayboy (Off. of Dir.)

Florence M. Bearde (APO)

Clerk-Typists:

Helen S. Moriyama (Personnel)

Caroline R. Crane (BAE)

A. Dianne Link (Off. of Dir.)

Barbara K. Metcalf (NCFA)

Junior Clerks:

Mildred M. Vaughn (BSIE)

John C. Schaffer (BSIE)

Guard:

Kenneth A. Walker

Machinist:

Eugene F. Shipman

Laborer:

George R. Darby

SEPARATIONS

Joanna M. Davis

Harold B. Elder

Gladys F. Morefield

Mildred M. Vaughn

Bradley Crawley

James L. Agnew

Lillian C. Goode

Austin Van Wooten

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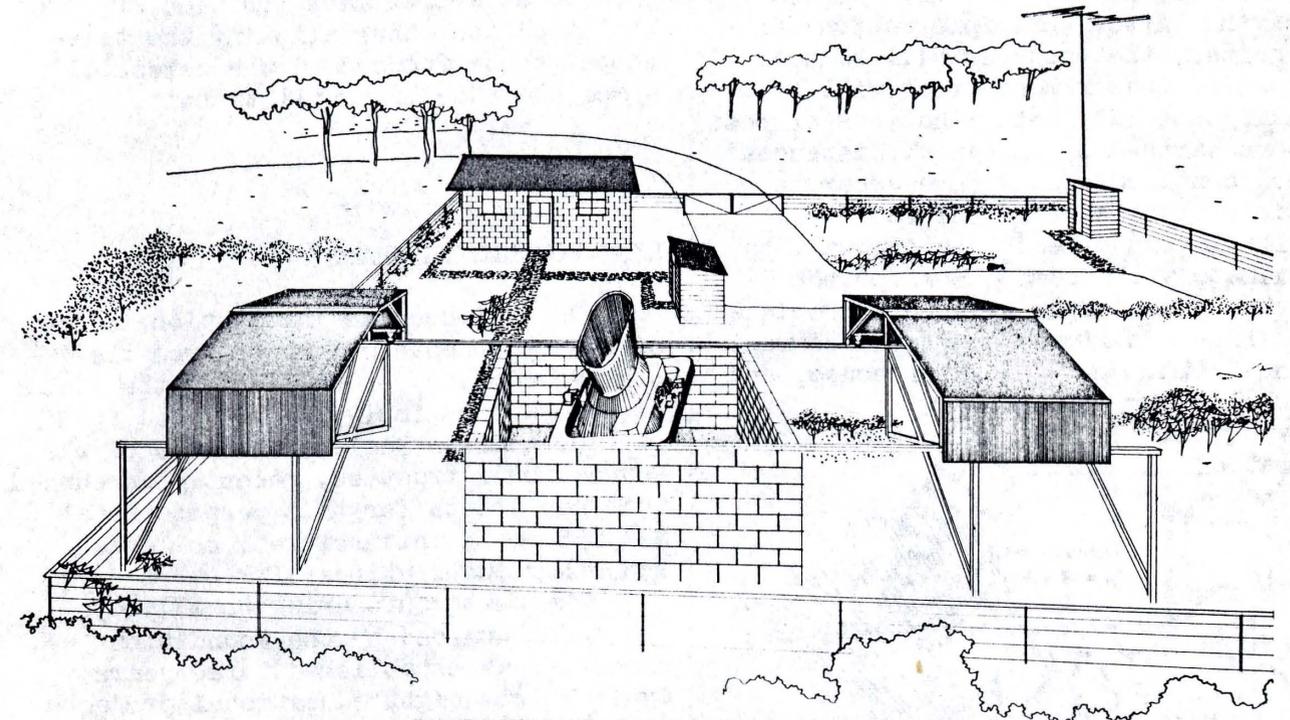
EVERETTE L. DEGOLYER

Dr. Everett L. Degolyer, member of the Board of Regents of the Smithsonian Institution and world-famous authority on petroleum geology, shot himself to death in his office in Dallas, Tex., on December 14.

Dr. DeGolyer held numerous advisory positions in the Government, one of which was membership in the advisory commission on U. S. atomic raw materials.

He was a native of Kansas. From 1906 to 1909 he was employed by the U. S. Geological Survey; later, he headed various oil companies.

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PHOTOGRAPHIC SATELLITE-TRACKING
STATION SHOWING CAMERA EXPOSED

SATELLITE TRACKING CAMERA

Twelve photographic satellite tracking stations are to be set up in various parts of the world to make precise measurements of the U. S. satellite while it is in orbit during the International Geophysical Year. These stations will be under the supervision of the Smithsonian Astrophysical Observatory, which is responsible for the tracking of the satellite.

Tracking stations are expected to be located in New Mexico, Florida, Netherlands, West Indies, Peru, Spain, Iran, India, and South Africa.

These stations are to be under the general direction of Dr. Karl G. Henize, astronomer on the staff of the Smithsonian Observatory, and each will be staffed by two observers.

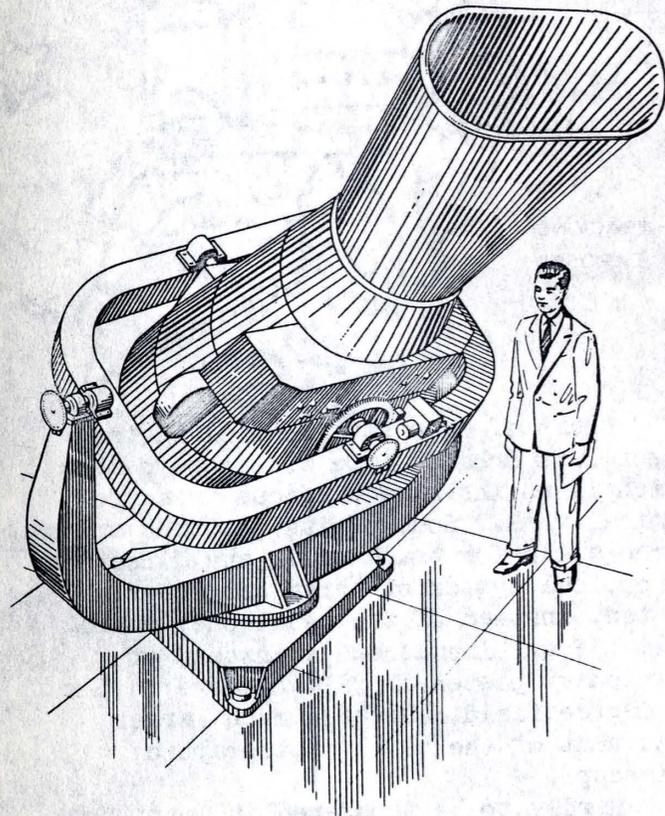
Heart of each station will be the Baker-Nunn Schmidt type telescope camera, which is an instrument unique in astronomical work. Some of its features are three axels for tracking in any direction; an optical system of three corrector plates, instead of the usual one; moving film (55 mm cinemascope), instead of stationary plates or film holders; a 5 x 30 degree field, which is much larger than that of the usual photographic telescope.

Hardly to be separated in importance from the telescope itself is the crystal, electronic clock to be used with it. Its accuracy will be to one-thousandth of a second, and through a slave clock on the telescope a graphic presentation of time will be made on the film that will record the satellite in the field of the stars.

Thus, the picture of the satellite at the moment it transits any point will

be obtained, and from these pictures astronomers will be able to compute the future course of the satellite around the earth. After this information has been gained, the pictures will be used for precise measurements that will help in making accurate determinations of positions on earth--for instance, distances between continents, and more accurate locations of islands in the Pacific.

The layout of each station will be approximately the same. Besides the telescope house there will be a combination office and living quarters, communications building, a generator house, and tool shed. Communications will be for receiving and sending information between the station and Cambridge.



Perspective drawing of Baker-Nunn satellite tracking camera

The visual observing program MOONWATCH to be carried on by the Smithsonian Observatory will be a necessary phrase in the operations of the telescope stations

These visual observers (MOONWATCHERS) will furnish information that will provide an approximate position of the satellite, thus allowing the telescopes to be focused on the celestial space the satellite will transit.

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LINK FOUNDATION GRANT

The Smithsonian Institution is one of the recipients of grants from the Link Foundation for studies in the field of aeronautics in 1957.

C. Addison Keeler, chairman of the Foundation's trustees, recently announced that new grants for this purpose total \$34,655 to 13 universities, colleges, and other institutions.

The new grants bring to \$77,865 the total awarded by the Foundation since it was established three years ago. Thirty-eight educational projects were launched or completed in that period.

The Link Foundation was established in 1953 by gifts from Edwin A. Link, pioneer in the design and development of flight simulators, and Link Aviation, Inc., Binghamton, N. Y. It was created to promote and advance scientific, technological and general education. Its first emphasis has been on assistance to institutions and organizations in developing aviation projects since Mr. Link has devoted most of his life to furthering aeronautics. The Link Foundation, administered as a charitable trust, demonstrates how a relatively small company's contributions assist education in advancing significant training and research.

Trustees of the Foundation, in addition to Mr. Keeler, include Cornelius C. Van Patten, Edgar W. Couper, Bertram J. Miner, and Thomas A. Wilson. Miss Marilyn C. Link is executive secretary. The Technical Assistance Board comprises Dr. Leslie A. Bryan, director of the Institute of Aviation, University of Illinois; Leonard Carmichael, Secretary of the Smithsonian Institution; and Frank E. Sorenson, chairman of the Department of Educational Services, University of Nebraska.

ARCHEOLOGICAL FIND

Archeologists have uncovered evidence suggesting human occupation in the Upper Hell's Canyon region on the Snake River over a period in excess of a thousand years. The evidence was obtained during the recent field season by Smithsonian archeologists of a River Basins Survey party working in areas to be flooded by the Brownlee and Hell's Canyon reservoirs.

Under the direction of Dr. Warren W. Caldwell and George L. Coale, the party, supported by funds provided by the Idaho Power Company, made an interesting series of excavations in rock shelters, refuse deposits, and village areas. Most of the material recovered came from four habitation sites--two on the Oregon side of the Snake River at Robinette and two on the Idaho side at Big Bar. The majority of the artifacts found indicate that these sites date from the late prehistoric period and the early period of European contact, but at two of them there were items coming from much earlier horizons. The general picture, according to the archeologists, is that of an early expansion of Great Basin cultural features into the Northwest and their later replacement by a more dynamic cultural pattern working upstream from Mid-Columbia centers.

The artifacts collected during the digging show that the people had a basically hunting-gathering type of economy. They include large numbers of projectile points, knife blades, scrapers, and other stone tools. The implements were found in association with quantities of deer and elk bones, indicating marked dependence on the hunting of large game animals. The presence of milling stones shows that there was some utilization of the many plant foods available in the area. Implements associated with fishing are for the most part lacking, but the abundance of fresh water mussel shells in

kitchen middens suggests that aquatic food had a place in their diet.

At an open camp site on Big Bar several house-pit depressions were still evident and one of them was excavated. A saucer-shaped floor measuring approximately 25 feet in diameter, with a depth of about one foot near the center, was uncovered. The depression probably served as the base for a light, possibly brush, superstructure. There was no evidence of a more substantial, permanent-type dwelling. Copper strips found slightly above the floor level are a good indication that that type of structure was still in use at a time when European trade goods were beginning to filter into the region.

When the first Europeans arrived the area was inhabited by a band of the Shoshoni known as the "Mountain Sheep Eaters." They were a seasonally nomadic group of Indians who subsisted mainly by hunting and gathering activities. They were last known to visit the region regularly in the 1880's, and their survivors now live mostly on reservations in Idaho and Oregon.

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PUBLISHED IN DECEMBER

"Seminole Music," by Frances Densmore. Bureau of American Ethnology Bulletin, 223 pages.

"List of Publications of the Bureau of American Ethnology, with Index to Authors and Titles," 116 pages.

"New Horizons in Astronomy," edited by Fred L. Whipple (articles by 42 authors). Smithsonian Contributions to Astrophysics, 191 pages.

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REPORT OF THE TREASURER OF THE SMITHSONIAN INSTITUTION EMPLOYEES
FEDERAL CREDIT UNION FOR THE YEAR ENDED DECEMBER 31, 1956

BALANCE SHEET

<u>Assets</u>		<u>Liabilities</u>			
<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>		
Loans	\$128,779.11	\$134,481.85	Shares	\$133,312.35	\$141,487.77
Cash in bank	5,304.69	18,944.23	Accounts Payable	762.03	421.45
Petty cash	10.00	10.00	Reserve for Bad Loans	9,293.27	10,675.34
Change Fund	50.00	50.00	Undivided profits	6,479.64	7,086.37
Investments:			Notes Payable	4,000.00	---
Fed. Savings & Loan Assns.	15,684.09	3,038.73			
U.S. Bonds	3,815.00	2,940.00			
Furn. & Fixt.	24.40	5.00			
Prepaid Exp.	180.00	201.12			
	<u>153,847.29</u>	<u>159,670.93</u>		<u>153,847.29</u>	<u>159,670.93</u>

STATEMENT OF INCOME AND EXPENSES

<u>Expenses</u>		<u>Income</u>			
<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>		
Sty. & supplies	\$63.65	\$55.55	Interest rec'd.	\$9,440.96	\$10,756.94
D.C. League dues	216.30	209.40			
Borrower's ins.	677.09	873.64	Income from Investments	618.77	497.53
Life savings ins.	794.32	844.51	Other income	36.77	36.12
Auditor's fee	278.52	316.27			
Supervisory fee	42.00	45.90			
Bond premium	90.00	170.54			
Bank service chrg.	16.98	58.35			
Treasurer's salary	1,320.00	1,440.00			
Other salaries	260.00	395.00			
Miscl. Expenses	63.50	122.55			
	<u>3,822.36</u>	<u>4,531.71</u>		<u>10,096.50</u>	<u>11,290.59</u>
Profit	<u>6,274.14</u>	<u>6,758.88</u>			
	<u>10,096.50</u>	<u>11,290.59</u>			

STATISTICAL REPORT

	<u>No.</u>	<u>Amount</u>
Loans made in 1956	387	\$164,002.79
Loans made in 1955	418	164,051.49
Loans made since organization	6,822	1,558,599.87
Loans outstanding December 31, 1955	346	128,779.11
Loans outstanding December 31, 1956	364	134,481.85
Bad loans written off since organization	30	1,513.21
Total paid on shares since organization		299,674.43
Number of members December 31, 1955	698	
Number of members December 31, 1956	716	
Dividends paid since organization	20	36,076.73
U.S. Savings Bonds sold since organization	7,100	554,047.50

THOMAS F. CLARK, Treasurer