

Shows Progress Made By Science

Annual Report of Smithsonian Institution Covers Wide Range of Subjects.

28 AUTHORITATIVE ARTICLES

Deal With Recent Advances of Interesting Phases of Every Branch of Science—Figures on Army Supplies.

Washington.—The Smithsonian Institution has just made public its annual report, which, among other things, contains a general appendix of articles covering recent advances of interesting phases of nearly every branch of science, including astronomy, physics, chemistry, geology, zoology, entomology and anthropology. The articles have been written as far as possible in a style intended to interest the general reader rather than the scientist, and, as the report states, "in this way carries out one of its principal objects, namely, the diffusion of knowledge."

One article is by Dr. Arthur D. Little and entitled, "Natural Resources in Their Relation to Military Supplies." In this article Doctor Little sees figures as to the number of various articles used by the American armies in the World war, illustrating, as he points out, the importance of the economic factor in modern warfare. For instance, 22,000,000 blankets were provided for our soldiers, and 700,000,000 yards of cloth was used in making their uniforms and overcoats, while the square yards of cotton textiles used by the United States during the war totaled 800,000,000. If this enormous amount of cotton textiles were laid out in one yard width, 55 globes the size of the earth could be placed upon it.

What Our Soldiers Used.
During the war period the American soldiers ate more than 1,000,000,000 pounds of flour, 800,000,000 pounds of beef and 20,000,000 pounds of jam and other substantial foods in proportion. Miscellaneous items for the army included 45,000,000 safety razor blades, 10,346,000 spoons, 4,000,000 pairs of rubber boots and 9,250,000 brushes of various kinds. Doctor Little also discusses in connection with military operations, coal, metals, explosives and other resources, concluding by showing that scientific research is indispensable not only in achieving military efficiency but also as an assurance of peace-time prosperity.

The influence of cold in stimulating the growth of plants is the subject of an article by Dr. Fredrick V. Coville. Doctor Coville shows that the general belief as to the causes of dormancy of plants in the fall and of their new growth in the spring is erroneous. He seeks to prove by numerous experiments that dormancy in trees and shrubs sets in before cold weather, and that cold weather is not necessary for the establishment of complete dormancy; that after dormancy has begun, the exposure of the plants to an ordinary growing temperature is not sufficient to start them into growth; and that these plants will not resume normal growth in the warm weather of spring unless they have been subjected previously to a period of chilling.

"Doctor Coville," says a statement by the Smithsonian Institution, "is of the opinion that a complete understanding of the results of the process of chilling will be of the greatest benefit to agriculture, especially in transferring plants from one part of the world to another, in growing various plants out of season, in grafting and

other processes of modern agricultural practice."

Urges Protection of Wild Birds.
Dr. Walter E. Collinge, in an article on the necessity of state action for the protection of wild birds, gives many reasons why the country should "jealously guard these feathered allies," which, he adds, are among the greatest enemies of the insect pests that annually destroy millions of dollars' worth of American farm products.

The report also contains three papers on the study of insects, two of them, "The Division of Insects of the United States National Museum" and "The Seven-Year Locust," containing many beautiful color plates, while the third, by Dr. L. O. Howard, chief of the bureau of entomology of the Department of Agriculture, reviews the war-time work of government entomologists in overcoming the insect pests that warred on the crops and animals of the country.

The various branches of the science of anthropology are represented by articles by Dr. J. Walker Fewkes, who describes two types of prehistoric cliff houses of the southwestern part of the United States; Dr. W. H. Holmes, who discusses the race history and racial characteristics of the American Indians, while the origin of the Czechoslovak people is treated in a translation by Dr. Alex Hrdlicka.

The total number of articles included in the report is 28, nearly all of them illustrated with plates and text figures.

Reverend Visitor From the Orient



Most Rev. Archbishop Sekizen Aral, the abbot of the Sojiji, head monastery of the Sodo Sect (in robes) from Tsurumi, Japan, with members of his staff on the steps of the White House after having been received by President Harding. The archbishop is making a tour of the United States.

Age in Winter, Not in Summer

Winter Exercise Is Important, Therefore, for Middle-Aged, Says Physician.

SWIMMING IS A GOOD ONE

Middle Age Demands Above All Steadiness and Continuity in Its Recreation—Time Is Chief Difficulty in the Way.

London.—Declaring that we age in winter and not in summer, the medical correspondent of the London Times urges the middle-aged to take some measures in the way of exercise to correct the deficiency. If they will do this, he says, and awake to a realization of winter exercise they will spare themselves many an hour of ill-health.

The approach of winter raises once again the question of winter exercise, he says. This is a most difficult subject. For at the very period when exercise is most necessary it becomes most difficult to obtain. The difficulty for the business man is especially great. He must leave home at an hour which makes early morning exercise practically impossible. When he returns home again it is already growing dark or quite dark. Thus his opportunities for outdoor recreation are practically withdrawn altogether, except at the week-ends.

On the other hand, says the physician, winter is a time of sedentary life. There is no inducement to go out of the office, and people tend to cut down their excursions from their own desks to the lowest point. They sit in warm rooms, which they leave only to go to their meals. All this means a sluggish circulation and sluggish removal of waste products. People, especially middle-aged people, get fat in winter.

Young people are better off, says the writer. The majority of them dance once or twice a week, and manage to get in some vigorous exercise on Saturday and Sunday.

Steadiness for Middle Age.

Middle age demands above all steadiness and continuity in its recreation, he says. There is so much waste to be got rid of every day. If this is allowed to accumulate to the week-end the tissues of the body become

clogged, symptoms of poisoning show themselves, and it is increasingly difficult to get rid of them. Like a piece of machinery that has been allowed to lie unattended, the mechanism of the body deteriorates.

You cannot safely set a piece of machinery going at its top speed, says the physician, and then neglect it for another week, and repeat the process. In everyday language that method is "asking for trouble."

What then is the middle-aged man to do in the coming months? The answer depends to some extent on his temperament. But more important than temperament is determination.

Some men of the physician's acquaintance solve the difficulty by playing a game of squash three or four times a week. They simply "take" the necessary time, and they are fortunate in belonging to clubs which have the necessary accommodation. Other men adopt swimming, and make a point of going to their baths every, or nearly every, afternoon for half an hour.

Time Is the Chief Requisite.

The chief difficulty is time, says the writer. It is often difficult to get

away, and often, in cold weather, the tendency is to shirk the exercise. This is a matter which must be left to the individual. It can be said, however, that an hour spent in this way is never an hour wasted; on the contrary, it may save many an hour of ill-health in his opinion. Moreover, the healthy glow of the vigorous man after his exercise is a better thing than the artificial warmth of the man who refuses to quit his office fire.

A more simple and also much less expensive method is to exercise at home. There is nothing to be said against physical exercise of this kind, except that it is apt to be very monotonous. Generally speaking, monotonous exercise is far less beneficial than that which contains an element of interest, for the reason that man is an intelligent being and not a machine, the writer asserts. You can never "whip" all his faculties to activity by means of a code of muscular movements. The thrill of the game is necessary to this purpose.

Yet some men are so constituted that they need interest in their recreation for less than others, the physician declares. These do very well on a short period of training each morning, and often show a remarkable determination in keeping it up.

The point is that if exercise is kept up during the week, it can safely and advantageously be intensified at the week-end. Thus, a vigorous round of golf on Saturday or Sunday will yield not exhaustion, but exhilaration.

NEWS OF STATE TERSELY TOLD

Recent Happenings in Nebraska Given in Brief Items For Busy Readers.

The Central Nebraska Poultry Association will hold its annual show at York, December 12 to 16.

The total paid for 98 head of Hereford cattle at H. Gaudreault & Sons sale at Hastings was \$29,810.

It is rumored that Dan B. Butler of Omaha will be candidate for governor at the democratic primaries.

John M. Matzen, state superintendent, in a bulletin issued, suggests that Nebraska teachers devote one period a day during American education week for Americanization talks.

Ray A. Lower, former cashier of the defunct Valparaiso State bank, was found guilty by a jury in district court at Wahoo on six or seven counts charging him with embezzlement.

Deputy State Fire Marshal Harry Hauster has been sent to Minden, at the request of city and county officials there, to determine the origin of the \$50,000 fire that destroyed the Binderup block.

Contracts for travelling thirty miles of Nebraska roads, twelve in Dawson and eighteen in Buffalo county, were let at Lincoln last week. The work to cost \$112,196.

Nebraska is the fourth state in the union in per capita acreage of improved farm lands, according to reports compiled by the bureau of publicity of the Omaha Chamber of Commerce federal census officials.

After silencing the gongs which were installed in order to alarm the town in case of attack by burglars, yeggmen blew open the door of the outer vault of the bank of Juniata, and fled with contents of 1,920 safety deposit boxes.

J. J. Barker, of Big Springs, was found guilty by a jury, of first degree murder and sentenced to life imprisonment for the murder of Ralph Rosell, following an argument over a woman.

Martin Estergard, who was begging on the streets at Grand Island, was taken to police station and when searched the police found a certificate of deposit on a Fullerton Bank for \$1,305.

The farm home of John Nelson, near Wakefield, was completely destroyed by fire of unknown origin. The occupants barely escaped with their lives. The house was valued at \$12,000 and the contents at \$2,000.

The Pawnee City Military band will combine with the Tecumseh band in a concert at the city opera house at Pawnee City, December 14. Prof. John Flala, leader of both bands, will have charge of the program.

A construction company has just completed a 52-block brick paving contract in Nebraska City, the entire job being completed 90 days after the contract was let. Many idle men were given employment.

Mrs. Josephine C. Keeler, 30, of Broken Bow, was awarded \$35,000 damages from the Omaha railroad for injuries in a railroad accident near Heerman in October, 1920. The woman asked for \$75,000. She appeared in court in a wheel chair during the trial which lasted for several days.

Warden Fenton of the Nebraska penitentiary was advised by the sheriff at Tipton, Ia., that Hugh G. Marsh, a convict who escaped from the prison last August, was under arrest in the Iowa town and intimated that the Nebraska authorities can have him.

Governor McKelvie's special board of inquiry, authorized under the administrative code law, resumed its probe of living costs in Nebraska at the senate chamber after a week's rest. Chairman Leo Stuhr announced that a new line of investigation would be taken up but declined to specifically state its nature.

The O'Neill Electric Light & Power company began burning corn for fuel under its immense boilers. The plant is the largest steam electric plant between Norfolk and the Black Hills. It furnishes all the light and power for that city and heats its principal business buildings. Corn costs \$7 a ton at the boiler rooms. Coal costs, on an average slightly over \$9 a ton laid down at the boiler rooms. Tests with corn as fuel showed its superior heating quality. The company will use about six tons of corn a day.

The Peyote church of Christ—the second Indian non-sectarian church to be organized under that name in Nebraska—has filed articles of incorporation with Secretary of State D. M. Amsberry at Lincoln. The new church is at Walthill, while the first was at Winnebago.

Over \$125,000 have been collected in fish and game licenses to date this year, or \$25,000 more than a year ago, according to Chief George Koster of the state division of fish and game. He estimates the expense of the division will be \$90,000, leaving \$35,000 for the state general fund.

The Lincoln Telegraph and Telephone company expects to move into the new \$100,000 building erected at Nebraska City in the next few weeks.

The state board of control at Lincoln will make a trip to Kearney to investigate charges made by the Disabled American Veterans of Foreign Wars against food and treatment of members at the state tuberculosis hospital. L. C. Oberlies, a member of the board, stated that since the end of the war, 63 veterans suffering from tuberculosis have been treated in the hospital, the government paying \$2.50 a day for each of them.

The newly elected Red Cross nurse of Cheyenne county is touring the county visiting all the schools and inspecting the teeth of school children.

Robert E. Moore, 72, lieutenant governor of Nebraska from 1895 to 1897 under Governor Sbas A. Holcomb, died at his home at Lincoln.

The clothing store of Gus Lorentz at Loup City, was entered by burglars and about 150 suits taken. The loss is estimated at \$3,500.

While at supper at the Maplehurst hotel, Dan McLeod, a pioneer of Schuyler and for ten years a member of the Nebraska legislature, was stricken and died.

Gustave Bahr, the squaw man, who has been on trial at Pierce charged with murder, was found not guilty by a jury, but was adjudged insane.

Charles E. Black will probably assume his new duties as postmaster at Omaha sometime this week. He just recently received his appointment.

The four year old daughter of Mr. and Mrs. Henry Pfeifer, of near Butte, was burned to death in the family home while her parents were out in the field picking corn.

The state seal commission at a meeting in Governor McKelvie's office decided on the general design of a new Nebraska banner, but withheld its nature until details of the emblem be worked out minutely.

Several farmers living in the vicinity of Shelton report the loss of horses from the corn stalk disease. F. C. Horth, who has been feeding corn fodder to his herd of horses, lost a valuable race horse.

The eleventh annual convention of the Nebraska Irrigation association has just closed at Bridgeport. This was the largest convention in point of attendance in the history of the association.

A fire which originated in the Westesen sisters millinery shop at Minden, completely gutted the Binderup block and caused a loss estimated at \$40,000. Insurance on the property was less than half its value.

Fire starting in O. E. Kratzer's Mercantile store at Virginia from an unknown cause, destroyed the Kratzer store and the Mitchell Hardware store. The fire department from Beatrice was called to assist in fighting the flames. The loss is placed at \$40,000 and is partially covered by insurance.

Frank T. Israel of Benkelman, who held a responsible position in the office of the comptroller of the currency for the last 30 years, has received a promotion to that of chief clerk in the chief national bank examiner's office of the Eleventh federal reserve district, with headquarters at Dallas, Tex.

When George Dorn, janitor of the Rudge & Gruenzel department store of Lincoln, was questioned about theft of a 10-cent bar of chocolate, he admitted, police say, having stolen over \$1,000 worth of costly silks and jewelry, which they say they found done up in life room ready to be shipped to relatives in Russia.

A total of \$100,000 damages is sought by F. S. Shoemaker and Charles N. Dean, Nonpartisan league speakers, from 13 citizens of Hartington, for slander and assault when they were taken from the lobby of a hotel there, the night of April 3, 1920, escorted out of town and warned never to return.

Total state receipts from taxes, institutions, fees, auto licenses and interest bearing funds for the six months ending June 30, this year, were \$11,216,473, according to an official report made public by State Auditor George W. Marsh. Expenditures for the same period were \$9,075,616, leaving a balance of \$1,180,000 to start the new biennium.

With telegrams and cablegrams pin-pointing the speaking voice, Lester J. Mabeus of St. Helena, Neb., C. S. A., and Maria Hahn, Paris, France, answered "I do" to the marriage lines as put by County Judge W. F. Bryant of Hartington early this week and became man and wife although 4,000 miles separated them. Mrs. Mabeus expects to leave for America soon.

A tax test suit has been brought by R. C. Basset in behalf of the city of Bayard against Morrill county. The board of equalization raised Bayard personal taxes 20 per cent and real estate, 50 per cent and local citizens claim that the increase was wrongfully made. It is estimated that Bayard has half the population of the county and pays two-thirds of the taxes, on account of the sugar factory property and valuable irrigated beet lands.

Arthur Cornins, farmer living near Lodi, lost thirteen head of cattle out of sixteen he turned into a field of cornstalks in one night.

A bulletin recently issued by the Bureau of Markets of the State Department of Agriculture, states that the average of oats in Nebraska increased somewhat last year over that of 1920. But this increase was overcome by the lower average yield which resulted in a considerably lower yield for the state. This summary is based on figures collected and compiled cooperatively by the state and federal bureau of markets.

L. M. Muek, a blind man, College View, has been appointed to be state field agent for the relief of the blind. His salary will be \$100 a month and he will travel about the state, visiting blind people, ascertaining their conditions of life, their ambitions and desires, so that the state can help them intelligently.

The Beatrice electric company reached a settlement with J. W. Cook, who brought suit against the concern for the death of his son, Robert, who was killed in Beatrice last summer by a live wire, by agreeing to pay him \$2,500.

MISSED HIS "PIE"

American in Europe Found That Luxury Unknown.

This Country, Apparently, Has Monopoly on the Fruit-Filled, Flaky Disks of Delicious Crust.

As soon as the snow begins to melt, the thing foremost in the mind of the hungry American is strawberry shortcake. For at least two delightful months' he revels in it.

Then shortcake thus gives way to the salad period; from the first radishes and lettuce, down the line of crisp green things, until in late summer our beloved tomatoes are finally eclipsed by that greater favorite "roastin' ears." A true American dish, this, but in this land of varied climate these favorites all pass.

But as we lose one good thing another is always ready to take its place, and now when corn has gone the way of shortcakes and salads in comes pumpkin pie to fill the void.

I wonder if in any other country, except Canada, perhaps, they have real honest-to-goodness pies. Probably our English cousins, thinking of their pork and mutton pastries, laugh up their sleeves and wonder what we know about pies.

In Winchester, England, I ate a little meat pie which I will admit was delicious, but never a round, flaky, crimped-edged, fruit-filled disk did I encounter in all the empire.

True, in Paris there are innumerable delectable tid-bits to be had that are so flaky they fall apart when one tries to eat them, but not a sign of lemon or custard filling hid beneath meringue, just a trifle brown.

In a little town called Sasserails, a few kilometers from Nancy, where our outfit was stationed at one time, I thought I had made a find. The French shopkeepers were compelled to keep a price list of all their merchandise posted on the wall and on one such list I saw the word "patie." Looking up the word in my French-English dictionary I found the English equivalent to be "pie." Immediately I rushed back and handed over to the madam in charge the three or four francs due, eagerly pointing out the word on her price list. What I received was a small tin of meat, much like our deviled ham.

The nearest approach to pie that Europe ever showed up was in Germany. Once, in Coblenz, in a bakeshop window, we saw an enormous plum concoction. The fruit was quartered and carefully laid in circles, one inside the other, completely covering the base, which was a foot and a half in diameter. But when we bought wedges of it, the base proved to be just plain "leuchen," and very dry at that.

In pumpkin pie we have a real American institution. It savors of all the Orient as that spicy, pungent odor wafts out across the kitchen when mother or wife, with heat-flushed face, opens the oven door and peeps in at it. But under the soft light of the supper table (dinner came at noon with us) its round golden-brown face smiles up at us—just as a homely Yankee friend—and all the French chefs in the world could never improve it.—Loring E. Williams in the Cleveland Plain Dealer.

Why Pianos Strike.

This story might also be called, "You can't blame them." It is about a piano that stood in the school building at Lexington, Ind., that has been torn down to give place to a new building. For safety the piano was placed in the Presbyterian church and as it was difficult to tell which was C sharp and which was B flat, a tuner was called. The catalogue of "fads" included one song book, two demountable drinking cups, nearly a pint of chalk, one ink bottle, 13 six-penny nails and two spiders, all extracted from the interior. It is said the pupils at high school tried all ways of playing it, from walking across the keys to playing jazz music, and the average person couldn't be sure at any time which of the two was on the program.

Pianos Carry Planes.

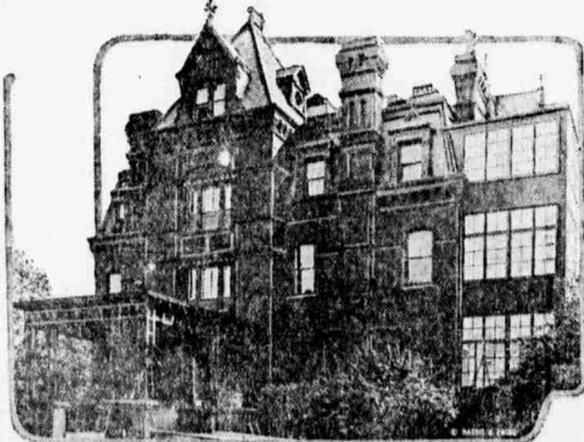
A battle plane which carries its own scout plane poised on the tip of one of its wings is the remarkable type of airplane recently developed in England. So far it is understood the tests have been successful. The parent machines have traveled at their usual pace, although the engine of the scout machine was kept running so that it was ready to dive off at a minute's notice to protect the larger and heavier craft. An expert pilot is carried by the bombing plane and as soon as his services are required he climbs through the top wing and takes his seat in the scout plane. By pressing a trigger he frees the smaller machine which at once glides along the battle plane wing and dives off.

To Increase Nail's Holding Power.

Here is a simple method of increasing the holding power of a wire nail or spike. With a flat file remove the point of the nail and then, with a hacksaw, split the nail for about one-fourth its length. The two halves should be beveled with a triangular file.

Before using the nail or spike, drill a hole of the same diameter as that of the nail in the wood to the depth you wish the nail to reach before spreading. Then place the nail or spike in the hole and hammer it down. It will spread in the wood like the prongs of an anchor.

Leased by Japanese for Arms Meet



The Japanese embassy has leased this building at Twentieth street and Massachusetts avenue, Washington, for the duration of the conference on the limitation of armaments.