Bring Dead to Life With Late Devices

One Stimulates Heart, Another Restores Breathing.

New York.-Nearly 500 persons apparently dead have been brought back to life in New York and Chicago by two of the scientific instruments recently developed by physi-

Many of these 500 were quite literally "dead" by ordinary tests-a few of them new-born babies whose bodies had been laid aside with the last hope given up.

The 500 were restored not only to life but to health. They are the answer of organized medicine to spectacular ideas of reviving dogs, suicides and executed criminals. They are the practical application of the same knowledge which is being used for the more sensational experi-

ments. The immediate objective is an annual company of American "dead' about equaling the number of automobile fatalities. It is believed that as many as 50,000 in this group could be saved yearly if the new devices reached them soon enough.

Gold Needle Saves.

There is no progress yet toward restoring to life the person who has died of a wasting disease-nor any wish by physicians to attempt it.

About 200 of those brought back to life here and in Chicago were treated with the artificial pacemaker, a gold needle which stimulates heart beats with electrical impulses at the rate of 30 to 120 a minute.

This needle was brought out two years ago by the Witkin foundation of Beth David hospital, New York city. It grew out of the fact that up to 1930 about 60 persons, apparently dead, had been brought back to life by hypodermic injections directly into their hearts.

Adrenalin was frequently used, but even a "shot" of caffein similarly given, restored some of the "dead." This all called attention to a mighty effort which nature herself makes in every heart, in the first 90 seconds after it stops, to get it to resume beating.

The heart quickly loses alkalinity, and its acidity rises. With rising acidity the heart becomes a better conductor of electricity, its own natural control is partly electrical, with exceedingly faint chemicalelectric currents.

Gives Electric Shock.

The prick of a needle, without any hypodermic at all, is an electric shock to a heart in this condition. Realization brought the protection of the "artificial pacemaker" to supply electric impulses.

It was found also that the heart

Son Won Part Victory Over Dad for School

Omaha.-Lloyd Skinner, Jr., twenty, who sought to compel his father to pay for his college education, won only a partial victory when he took his case to District court.

The judge ordered the senior Skinner to remit \$300 for his son's college expenses last year, holding Lloyd had a right to complete the term having entered college.

He refused, however, to order the father to pay for another year.

Sales of Black Walnut Help Carolina Farmers

Raleigh, N. C .- Ice cream and nuts. Farmers needed money. The stepped in and helped them get together.

Many farmers had black walnuts going to waste, with no hope of selling them. In finding a market for the nuts the department of agriculture opened a new source of much-needed revenue for the grow-

has an electrical pacemaker of its own, a small group of cells in the right auricle, which seem to regulate the beat of the entire heart muscle. The gold electrical needle is used to substitute for these pace-

Use of the needle tip there, instead of haphazardly about the heart, appeared to be frequently the direct source of recovery of life and permanent health.

making cells.

The other new device for restoring the "dead" is an insufflator, sponsored by the society for the prevention of asphyxial death. It is a pressure apparatus for mechanical breathing, which goes a step farther than the "mechanical lungs," the equipment of emergency squads and artificial respiration.

Insufflation forces oxygen and carbon dioxide into the lungs. Moreover it mixes them when necessary in proportions to stimulate as well as give the ordinary effects of air. I pooned whale.

Capital Squirrels

in Need of Dentist Washington, - White House

squirrels need a dentist. They are suffering with pyorrhea, gingivitis and plain toothache, park commission experts said recently. A frisky young squirrel of the

Coolidge administration died recently and examination of its teeth disclosed the shocking

The White House squirrels are the most pampered in the world. They are overfed on soft foods and never gnaw any nut harder than a peanut.

South African Carries Whales in His Suitcase

Capetown,-"Anything to declare?" asked the customs officer. "Two whales," said the man with the suitcase.

"Don't be funny," snapped the officer. "Just open that bag." The man opened the case-and

produced the whales. They were contained in bottleswhale embryos taken from a har-

Lindbergh Reveals Germs Travel High

Flights in Arctic Regions.

Washington, - Col. Charles A. Lindbergh, by his flights across Arctic regions in 1933 has enabled the Department of Agriculture to demonstrate conclusively that the spores of plant disease can be borne on remote air currents.

With a spore trap of his own devising, which he called "the skyhook," Colonel Lindbergh obtained specimens which confirmed the previous theories of government ex-

> **SMART SKI SUIT** By CHERIE NICHOLAS



When a lady of fashion goes skiing or skating her costume must be as much up to the mark in chic, candy companies needed black wal- as carefully planned as if she were dressing for an opera premiere or state department of agriculture a ball in the governor's mansion. In the way of rugged outdoor sportswear, the outfit pictured is high style in every detail. Navy blue engadine fashions this attractive ski and skate suit. It is belted in a practical way and has convenient patch pockets. The stunning white knitted accessories have a brightly part of the country. It had carved colored Norwegian design.

Obtains Specimens in perts that plant diseases may becarried across continents by air currents.

That was announced by Fred C. Meier, the department expert who interested Colonel Lindbergh in the

Wife Helps in Work.

Colonel Lindbergh obtained the specimens while he and Mrs. Lindbergh were flying back and forth from Denmark to the North American mainland during the summer of 1933 in an effort to chart a northern transatlantic route for regular air commerce.

Colonel Lindbergh devised his "the skyhook," a light, strong contrivance easy to operate and well adapted to protecting sterile glass slides from contamination except for the time they were exposed. Mr. Meier prepared the slides and has examined and photographed them. He credits Colonel Lindbergh with careful work.

The Lindberghs exposed 26 slides and returned them with field notes and free-hand maps indicating exactly where and for how long and nuer what conditions each slide had been exposed. Mr. Meier has taken care of the preservation of the slides and has examined and photographed representative sections. He has been able to identify the genus and in some cases the species of many of the objects trapped in the petroleum jelly which covered the slides.

Await Further Identification.

More complete identifications will in many cases have to await the assistance of botanists familiar with the characteristics which identiby various kinds of pollen, and of scientific workers who are specialists in different groups of fungi, mosses, lichens.

On one slide exposed far north of the Arctic circle, Mr. Meier was able to discover under the microscope more than 40 different types of objects in a space five centimeters square. This was on a slide exposed 3,000 feet above sea level along the northeastern coast of Greenland.

"This Lindbergh collection," says Meier, "is the first of its kind to give concrete evidence of the part played by air currents in the distribution of fungi between northern lands."

Old Turtle a Bit Dated

Whitman, Mass .- Harry E. Barrows hauled out of Brigham pond one of the oldest turtles in this on its back the date 1855.

This Parade Wasn't as Funny as It Looked



When Urban Lerroux's club of Old Bucks and Lame Ducks marched from the Bowery in New York the people in the streets first laughed, and then grew serious and sad. The proteges of "Mr. Zero" were petitioning for clothes or at least \$1 a week with which to buy them.

SEEN and HEARD around the National Capital By CARTER FIELD

Washington. - A drive against "rackets" in so-called protective committees of stock or bondholders of corporations, especially those in receiverships, is about to begin as an altogether unexpected development of the securities and exchange commission activities.

Every investor has realized for some time there were grave abuses in these committees, that they ran up fees and charges even when they were legitimate, and that all too often their main purpose was to be bought off by those really trying to revamp the corporation in the interest of the stockholders.

So far there is no indication that the commission is going any further, but its reports to congress, which will be made in a few months, will, according to very reliable sources, at least start a move -whether it gets very far or notat doing something about the high cost of receiverships.

For the present the commission is aiming chiefly at men who have made practically a business of getting unthinking stock and bondholders, already faced with the prospect of losing part of their investments, to go into moves which benefitted the operators, but in the long run only increased the loss of the investors.

The next logical step, senators familiar with the plan declare, is to go after the perfectly exorbitant legal and other fees being charged for administering financially crippled organizations.

One senator cited a case where a hotel property is being administered by three lawyers, no one of whom ever had any experience in the hotel business, but who are being paid \$10,000 a year each for their services in directing this property's operations. Actually, of course, no one of the three devotes very much time to the actual operation of the hotel.

Hits Bondholder

The point this senator emphasized is: what chance does a stock or bondholder have of getting anything when a property, already crippled or it would not be in receivership, has this additional load out upon it?

More to the point is the case of an office building where two lawholders' protective committees, sent bills for \$15,000 each! It so happens that if this particular office building had possessed \$30,000 at the time-just the total of this lawyers' bill-it would not have had to go into receivership at all! And it so happens that there are several other "protective" committees operating at the moment in behalf, allegedly, of the bondholders of this particular enterprise.

"The trouble about anything permanent being done," the senator remarked, "is that there are too many lawyers in congress. I happen to be one myself, but the fact is-and if you quote me by name I will deny I even had such a thought -the boys do stick together. And the judges who appoint receivers and who pass on the fees of attorneys for protective committees are all lawyers. I do not know just what ought to be done about it, but certainly it has approached the stage of a scandal. And beyond the shadow of a doubt the property of investors who are unfortunate enough to have put their money in enterprises which get into receiverships, is actually looted by the present system. I hope that what the securities commission starts will bear fruit."

New Dealers Fussed

New Dealers are torn between pride and alarm over the action of New York state electric companies in proposing a substantial reduction in rates. They are proud that President Roosevelt's policy of doing everything possible to lessen the cost of electricity to consumers is meeting with such success. They are a little alarmed as to what these particular cuts in this particular territory may do to the fight approaching in the senate over ratification of the St. Lawrence seaway treaty.

Not that the votes of the New York senators are involved. Both of them are strongly against the treaty and are expected to stand firmly against it regardless of the power question. Their concern is with the port of New York, and the railroads leading through New York state to it, and with the Erie canal. The question of cheaper power is very mild in importance indeed to them in contrast with the threat to the prosperity of their big port and the communication lines leading to it.

But this cut in power rates in New York state, presupposing further cuts later on, hits a very serious blow at the project as a whole, other parts of the United States that the whole scheme is economi-

At present there are two sections of the country arrayed against each other on this treaty, for local reasons. All of the Atlantic and Gulf seaboards are against it for the

same reason that New York is against it. Most of the Central and Northwestern states are for it on the theory that it would provide cheaper freight rates for their export products by letting ocean going ships come into the Great

Illinois is an exception. Its geographic position would naturally make it for the treaty just as Michigan, Wisconsin and Minnesota are for it. The canal would make Chicago virtually an ocean port. But this is complicated by the fact that Illinois and Chicago want to take more water out of Lake Michigan. And President Roosevelt has not the slightest intention of giving in to Illinois on this.

Might Be Liability

This leaves the Southwest and the Pacific coast not directly interested in one way or the other except as the project may tend to prove an additional burden on their taxpayers. And there is where the possibilities of these rate cuts already planned, and those obviously in prospect, come into the picture.

For they mean that the current produced by the St. Lawrence seaway project may actually turn from what has been regarded as an asset, in consideration of the project as an economic whole, into a liability. It is even conceivable that the President may lose some of his keen interest in the project, though he has said nothing to indicate this.

But if the proposed cuts of electric rate are followed by such a program of future cuts as has been suggested, actually the chief reason for his being so strong for the treaty will have disappeared. He has never said so-publicly-but all his close friends know that since the beginning of his interest in the project his chief concern was not the seaway to make cheaper freight rates to Europe for the Middle and Northwest, but the power. It was part and parcel of his plan for forcing down electric rates all over the

He never said so for the simple reason that the St. Lawrence seaway has been a very popular issueas a seaway, not a hydroelectric scheme-in the Middle and Northwest for many years. But the fact stands out that unless he pulls wires with really extraordinary success, the treaty will be defeated again this year.

President Optimistic

President Roosevelt is much more optimistic about the financial future of this government, providing yers, after performing a very minor he can hold the bonus compromise legal service for one of the bond- down to a reasonable figure that either his budget message or his ex planations of it to newspaper men senators and members of the housindicate.

To begin with, there is a \$4,000 000,000 "kitty," to use his own word in conversations about it. Only he does not speak of \$4,000,000,000 -he speaks of \$2,000,000,000. Which is another indication of how hi mind is working. For it will be re called that in each of his budge messages he has gone out of hi way to put the worst foot forward the aim always being to be able to make the picture look better-b contrast-at some future date.

As a matter of fact, had hi strategy been of a different variet -had he been trying to make the financial picture look rosy instead of dark with doubt-he could have painted a rather optimistic picture Instance: He could have made a fair calculation, say somewhere from 50 cents to 90 cents on the dollar, of the debts owed the Re construction Finance corporation Actually the corporation expects a net profit when it finally winds up

He could have used the \$4,000. 000,000 "kitty" on another offset This "kitty" consists of \$2,000,000. 000 profit made on the revaluation of gold, and \$2,000,000,000 additional in the equalization fund. which was voted by congress, and is being administered in absolute secrecy by Secretary of the Treasury Morgenthau.

Profit in Silver

Experts who have tried to figure, without inside information which is not obtainable, all agree that there is a considerable profit already. On the silver purchase. for example. Some estimate it as being more than half a billion dollars profit right now, without calculating any further advance in the price of silver.

But the President did not want to make the budget statement any more optimistic than he could help He wanted as blue a picture as possible for two reasons.

One is that the more rosy the budget outlook, the greater difficulty he would have restraining the bonus seekers. That is fairly obvious. It fits in with his direct threat that if congress boosts the expenditures proposed in the bud the half dozen most important get in any substantial particular congress must provide the money by imposing additional taxation.

The other, and in a way the more important, is for the effect at some so to speak. It makes far more time in the future. There will be difficult the problem of convincing another budget message one year from now, which will be in the year of a Presidential election. If things should not be so rosy for the administration at that time as they are now, it might be very helpful to present a more optimistic

picture to the country. Copyright .- WNU Service.



Stratosphere Balloon Poised for the Take-Off.

NOTHER flight by a huge balloon into the stratosphere I will be made in the summer of 1935, jointly by the National Geographic society and the United States army air corps. Capt. Albert W. Stevens will be in command of the balloon which will be piloted by Capt. Orvil A. Anderson. Like the expedition of last summer, the flight of 1935 will take off from a natural basin in the Black Hills, eleven miles west of Rapid City, S. D.

Preparation for such a flight is stupendous task. From the inception of the last flight in the fall of 1933, with the guidance of the scientific committee appointed by President Grosvenor of the National Geographic society, no pains were spared to produce the best possible instruments and equipment for collecting scientific data in the stratosphere. The instruments were to be of full laboratory size to insure the greatest attainable accube both bulky and heavy.

To house these many large instruments, it became necessary to cate vacuum tubes.

apparatus high into the stratobe required. Experts were consulted, skilled in such construction, and a contract was given to design and build a larger balloon than any previously constructed-a bag which, when fully inflated, would contain 3,000,000 cubic feet of gas. It required five months to fashion

this gigantic bag, and into it went two and a third acres of rubber-impregnated cloth made from long staple cotton. While it was being built, work was begun on the gondola, a globe of dow-metal, lighter than aluminum; and in a score of laboratories and workshops from New York to California specially designed instruments were being constructed.

Meanwhile a site for the base camp of the stratosphere flight had been chosen in western South Dakota, Three considerations determined this choice: the point was far enough west to permit the balloon to drift even 700 or 800 miles to the eastward, and still come to earth in relatively level, unforested country; the record of the region was promising for good summer flying weather; and the site was sheltered from surface winds.

Making the "Stratocamp."

Early in June a camp was established in the deep, cliff-encircled natural "bowl" near Rapid City. It quickly became known as the "Stratocamp." Capt. Orvil A. Anderson was on the scene from the start. Under his capable direction the camp developed from an almost deserted basin into a bustling little village of more than a hundred inhabitants.

Three telephone lines and two radio stations kept the Stratocamp in communication with the outside world; and there were two telegraph wires leading to teletype machines which constantly rapped out weather information from points as far away as Alaska, Cuba and Iceland. The special weather station set up at the camp, through the cooperation of the United States weather bureau, the signal corps, and the air corps, ranked, in fullness of information furnished, with weather stations in the United

Two weeks after the camp was started Captain Stevens went out by plane from Washington, taking some special instruments. A few days later Maj. William E. Kepner flew into Rapid City, and the flight personnel was complete.

of the equipment necessary for a with heavy steel cylinders contain- the balloon was away for the ing compressed hydrogen arrived in stratosphere.

Prepared by National Geographic Society, Rapid City, Thanks to the generous Washington, D. C.—WNU Service. co-operation of the National Guardsmen of South Dakota and their fleet of trucks, these tons of steel were soon neatly piled along one edge of the camp.

Collecting the Equipment.

The gondola rolled in by truck, after a journey of more than a thousand miles, from Midland, Mich., and was installed in the commodious gondola house, the entirefront of which could be opened up.

A few days later another truck brought in a huge box containing the balloon bag, which weighed two and a half tons.

The largest truck of all to traverse the winding road down intothe basin arrived the following week-the liquid oxygen generator truck of the army air corps. It. supplied the essential liquid oxygen used to make breathable air insidethe gondola during the flyers' stay in the stratosphere.

Several airplane loads of instruments were flown to Rapid City: racy. This meant that some would | and daily freight and express packages arrived, their contents varying from machine shop tools to deli-

design a gondola larger than any For many weeks the gondola house was the center of activities Finally, it became apparent that that started sometimes as early as to lift the gondola and its cargo of four o'clock in the morning and often lasting until nine o'clock at sphere, a very large balloon would night. Numerous instruments and pieces of equipment had to be assembled, tested, some of them altered and all of them firmly fixed in the places assigned to them on the gondola shelves or hanging from

the gondola roof. The last of the preparatory work was completed on July 9. From that time on the flight could have taken place any day, so far as the equipment was concerned. But it was essential that the flight bemade during very special-and, unfortunately, rare-weather conditions, covering the area for seven or eight hundred miles east.

At last, July 27, on the longawaited high-pressure area had drifted in from the west and promised for the next day the conditions wanted both at the Stratocamp and to the east. When, at noon, Major Kepner announced officially that the weather was satisfactory for the flight and that the inflation would begin that evening, the camp was galvanized into activity.

Off for the Stratosphere.

Guests were barred from the floor of the "bowl"; only men with definite jobs to perform were permitted in the camp. The balloon box was opened and the huge, billowy mass of fabric was spread out on the circular sawdust-covered canvas-protected bed that had been prepared for it.

Bus load after bus load of soldiers arrived from Fort Meade. They were the men of the ground crew who were to hold the balloon in leash while the hydrogen poured into it. On all sides the preparations

moved ahead like clockwork. At dusk the floodlights in the great ring that extended around the floor of the basin were turned on and a little later the hydrogen gas was started through the canvas tubes into the vast maw of the balloon.

By shortly after five o'clock there remained only a few last-minute tasks to be performed—the careful placing of rope ends for valve and rip-cords; the lashing on of a small mail sack; the loading of warm flying clothes and parachutes.

Captain Anderson and Captain Stevens climbed into the gondola: Major Kepner to its rope enclosed top, the better to direct the take-off.

The outer ropes were dropped: only the gondola and ten small hand ropes attached to it held the gigantic bag of gas to the earth. Major Kepner directed the final ground activity of the flight before Freight car loads and truck loads | the ascent-the weighing off, Ropes were slackened to test the balloon's stratosphere flight had been con- lift. Ballast was adjusted until verging on the Stratocamp for the upward pull seemed just right, weeks. Three railroad cars filled Then came the order, "Cast off!"-