

LARGEST BALLOON WILL MAKE JAUNT TO STRATOSPHERE

Geographic Society and
Army to Co-operate in Effort
to Reach New Height
in Upper Air for Science

WASHINGTON, D. C.—(Sp.)—Two stratospheric ascents to the highest point to which it is practicable for a balloon to lift a man, will be made in the United States during the coming summer, in the hope of clearing up problems of the upper air that are still puzzling to science. It was announced by the National Geographic society and the U. S. Army air corps, sponsors of the project. The balloon, with a capacity of three million cubic feet, will be the largest ever constructed. It is estimated that it will rise to a height of more than 15 miles above sea level.

Capt. Stevens Observer.
The first ascent will be made in June by Captain Albert W. Stevens, noted aerial observer and photographer of the Army air corps, who conceived the project, and Major William Kepner, balloon expert of the Army air corps. If this flight is successful, the same balloonists will make a second ascent in September, in order to check observations under similar conditions.

The flights will be known as the "National Geographic Society-Army Air Corps Stratosphere Flights." To advise in regard to the scientific plans and equipment, and to direct studies of the data collected, Dr. Gilbert Grosvenor, president of the National Geographic society, has formed a committee of outstanding American scientists.

The huge balloon to be used in the ascents will have a gas capacity five times that of the bag in which Commander Settle established his 11 1/2-mile record last November; and nearly 3 1/2 times that of the Soviet balloon which in September rose more than 12 miles above the earth.

The exact point at which the balloon will take to the air has not been selected, but it will probably be in the northern great plains region. Such a choice, it is pointed out, will give ample room for drift to the northeast, east or southeast and a landing in open country, so that the bag can be salvaged.

Seek Record for Weather Studies.
The completed plans for the flights are due to the efforts of Captain Stevens, who has gathered data during the past 11 months directed toward the use in stratosphere flights of the largest balloon which it is practicable to construct, and an ascent to the highest point to which it is believed possible for man to rise in a gas bag, with hope of a safe landing. The mere attainment of altitude, however, is not a primary object of the ascents. It is desired to reach the greatest attainable height above the earth in order that conditions there can be observed.

Captain Stevens has penetrated the lower levels of the stratosphere by airplane on numerous occasions, and also has served as observer on a number of army balloon ascensions. During his high altitude flying he has collected much scientific data. In a flight over Dayton, Ohio, in October, 1928, he reached an altitude of 30,150 feet and obtained the only complete record of thermometer readings ever made in America, showing on the same day the "temperature gradient" in the region of the earth to the stratosphere. Other such records of altitude of approximately 80,000 feet, is one of the objectives of the 1934 ascents. Such data will be extremely valuable in weather studies.

Air to Be Brought to Earth.
Another project of importance will be the trapping of samples of stratosphere air at several levels. These specimens will be analyzed and studied later in physical and chemical laboratories.

The preliminary "agenda" for scientific data to be collected during the ascents, contains 14 other items, varying from high level photography and the ascertainment of the electrical condition of the air at various levels, to cosmic ray studies and efforts to determine ozone concentration. The mysterious ozone layer of the upper air, which some scientists assert is all that saves life on earth from destruction by ultra-short light rays, is thought to lie far above the highest point that can be reached by a manned balloon. It is hoped, however, that evidences of an increasing ozone content of the air can be detected in the ascents.

In order to house the many instruments and automatic recording devices that will be taken aloft, the balloon will have attached to it a spherical gondola of light metal, nine feet in diameter. This is two feet greater than that of the gondolas used by Professor Piccard and Commander Settle, and will provide a cubic capacity of more than twice as great.

The instruments, many of them designed and modified by Captain Stevens as a result of trials during high altitude flights, will be largely automatic, leaving observer and pilot free to take care of the many activities in the gondola that will require personal attention.

In order to house the many instruments and automatic recording devices that will be taken aloft, the balloon will have attached to it a spherical gondola of light metal, nine feet in diameter. This is two feet greater than that of the gondolas used by Professor Piccard and Commander Settle, and will provide a cubic capacity of more than twice as great.

The instruments, many of them designed and modified by Captain Stevens as a result of trials during high altitude flights, will be largely automatic, leaving observer and pilot free to take care of the many activities in the gondola that will require personal attention.

In order to house the many instruments and automatic recording devices that will be taken aloft, the balloon will have attached to it a spherical gondola of light metal, nine feet in diameter. This is two feet greater than that of the gondolas used by Professor Piccard and Commander Settle, and will provide a cubic capacity of more than twice as great.

The instruments, many of them designed and modified by Captain Stevens as a result of trials during high altitude flights, will be largely automatic, leaving observer and pilot free to take care of the many activities in the gondola that will require personal attention.

In order to house the many instruments and automatic recording devices that will be taken aloft, the balloon will have attached to it a spherical gondola of light metal, nine feet in diameter. This is two feet greater than that of the gondolas used by Professor Piccard and Commander Settle, and will provide a cubic capacity of more than twice as great.

The instruments, many of them designed and modified by Captain Stevens as a result of trials during high altitude flights, will be largely automatic, leaving observer and pilot free to take care of the many activities in the gondola that will require personal attention.

In order to house the many instruments and automatic recording devices that will be taken aloft, the balloon will have attached to it a spherical gondola of light metal, nine feet in diameter. This is two feet greater than that of the gondolas used by Professor Piccard and Commander Settle, and will provide a cubic capacity of more than twice as great.

Woman Sets Birth Record
STOCKHOLM.—(UP)—A woman living in Landskrona has set a possible record by giving birth to five children last year. She bore twins in February and produced triplets not long before Christmas. This makes

a total of 10 progeny since her marriage in 1925.
CIVA Fights Ticks
NEW ORLEANS.—(UP)—Nearly 2,500 civil works administration workers are constructing dipping vats in

the 39 remaining tick-infested parishes in Louisiana in an effort to make the entire state free of tick-infested cattle in 1934.
60 Per Cent Voted on Repeal
HARRISBURG, Pa.—(UP)—Only 60

per cent of Pennsylvania's voters cast ballots on prohibition repeal, a study of the November 7 election returns revealed today. Out of 3,992,278 registered voters in the state, only 2,447,924 persons voted on the prohibition question.

STOCKTON SPRINGS, Me.—(UP)—Strangers calling at the home of Howard Colson are surprised to find a red fox in the role of family watchdog. The odd pet romps and plays with members of the family but is shy in the presence of strangers.

NORTH BEND, Ore.—(UP)—The city of North Bend made a \$440 profit on two issues of scrip, printed on myrtle wood discs. The scrip was issued for pencils, are being made from here to Germany. Much of the wood used for pencils in the United States comes from western Oregon.

Germany Gets Pencil Wood
COTTAGE GROVE, Ore.—(UP)—Shipments of income cedar lumber, used for pencils, are being made from here to Germany. Much of the wood used for pencils in the United States comes from western Oregon.

Wards February Values



ZINC-ITE PAINT

Our finest house paint. Your choice of colors. Gallon... \$2.69
Kalsomine—in handy 4-lb. pkgs. Pkg. 36c
Wall size—use before kalsomining. 1-lb. pkg. 25c
Wallpaper paste—2-lb. packages. Makes 2 gal. of paste 29c
Kalsomine brush—just the thing for small jobs 80c
Shellac—white or orange in a new handy size 10c
Wallpaper cleaner—also cleans window shades, can 10c



Superslate Roofing

A long-life roof of fire-resistant slate. Beauty and protection. Your choice of colors. Covers 100 sq. ft. \$2.95

WARD VALUES IN HOUSEWARES

... Typical of many more!

Food Chopper \$1.19	Sauce Pan—Cast aluminum. 2-qt. 80c	Combinet—8-qt. 60c
Dinner Set—32-pc. Service for 6! Feb. value—\$3.95	Kitchen Light Opal ball \$1.29	Glass Churn Whips quick-ly. Only \$2.39
Tea Kettle, Ivory enamel, for \$1.19	Ironing Board, Only 79c	Clothes Basket of willow 39c
3-qt. Tea Kettle, Aluminum 50c	Clothes Pins of hardwood, 1/2 doz. 15c	Washboard Crispy brass. Only 35c
Broom, 3-sewed. Only 29c	Wash Ball—Galvanized—13-gallon size. \$1.25 val. \$1.49	Garbage Can—20-gal. Galvanized. Feb. value—\$1.25
Tea-Set for 2 and 4 dishes. Double. \$1.39	Ward's Wax	Percolator 9-oz. aluminum. 8-cup 50c

WARD PAINTS



Porch Paint

A special hard enamel for floors or porch. Grey. \$1.49 gal.

4-Hour Enamel

A Ward Value
93c qt.
Dries hard in 4 hours. Can be washed. 17 colors.

Semi-Gloss Varnish. 1/2 Wood or metal. Qt. 65c
1 qt. 83c



Rambler Oil

Refined from high grade crude. In two-gallon cans. \$1.19 Can



BARBED WIRE

Face a Quarter Mile for only \$1.95 Cattle Wire

Here's the wire you want because it is made from tough annealed wire, heavily galvanized for longer life. Spool contains 80 rods. Wound tight-in. Won't tangle. Barbs are long and sharp!

Poultry Netting

2" mesh, 20 ga. in 150 foot rolls

24"	\$1.35
36"	\$2.25
48"	\$2.75
60"	\$3.45
72"	\$4.65

Post hole diggers \$1.19
Barb wire stretchers \$1.39
Shovels, long handle .98c

MONTGOMERY WARD

117 South Central Telephone 285



INSTANT DIALING

No Numbers to Remember

Now... a New Cabinet

10-Tube RADIO

\$54.95

\$5 down, \$6 a month

New cabinet—and a beauty! 1934 Superheterodyne! Big Super-Dynamic Speaker! Police calls! Wards exclusive Instant Dialing—dial the way you think! It's a Ward extra value!



Coal-Wood Range

\$59.95

\$5 down, \$6 monthly. Small carrying charge

Here's one of the finest ranges of this type! Made of cast iron and steel with asbestos insulation. Heavy cast-iron firebox burns coal or wood. The whole range, except the high-polished griddle plate cooking top, is covered with first-grade porcelain enamel. The oven is full 18 inches and has heat indicator in door. Is a perfect baker. Our price saves 25 percent!

Here's A Real Cook Stove at a "Bed-Rock" Price!

COOK STOVE

\$14.75

It has a new, larger firebox, Duplex grates and a convenient drop door. Burns wood, coal or chips. Of heavy steel, highly polished.



Stock Fencing

29c a Rod

Stay wires can never spread because hinge joints lock them. Copper steel.



Unmatched Value, We Believe!

Bathroom Set

3 pieces \$59.95

\$5 Down, \$6 Monthly. Small Carrying Charge.

Every material, from enamelware to chrome plating, is absolutely first quality! But see for yourself what a value it is! Let us explain its many features.

Pieces priced separately:

Tub	Lavatory	Closet
\$31.00	\$16.50	\$21.25



Electric Pump

\$39.95

250 gal. per hour capacity. Heavier duty outfit as illustrated, \$44.95.

Porcelain Enameled! Ward's Coal and Wood Steel Range

Steel Range

\$43.95

\$5 down, \$5 monthly

The front is of heavy cast iron, the rest of range steel, asbestos insulated. Full porcelain enameled in ivory and green. 18 inch oven with heat indicator in door.



SAVE \$5

During February Furniture Sale!

WARDS GIANT TUB WASHER

Reduced to \$56.95 \$5 DOWN \$6 a month. Small carrying charge

IT'S a Ward Sale you'll never forget if you buy this washer. Think of it—a clear saving of \$5.00. And bigger tub 23 inches wide saves you more work than ever. Lightning fast!—You put in 16 shirts at once—you do a week's wash for 6 people in 1/2 hour! And our special gentle wash-board-action makes clothes whiter, last longer. Buy in this Sale—SAVE!



Unmatched Value, We Believe!

Bathroom Set


3 pieces \$59.95

\$5 Down, \$6 Monthly. Small Carrying Charge.

Every material, from enamelware to chrome plating, is absolutely first quality! But see for yourself what a value it is! Let us explain its many features.

Pieces priced separately:

Tub	Lavatory	Closet
\$31.00	\$16.50	\$21.25



Electric Pump

\$39.95

250 gal. per hour capacity. Heavier duty outfit as illustrated, \$44.95.



13 Plate Battery

\$33.95

with old battery

Standard size plates and Wards famous 12 month guarantee of dependable service. Installed free.