

# HELICOPTER TOO COSTLY FOR COMMERCIAL USE

## Dr. Zahn, Navy Expert, Declares Invention Has War Value—More Dangerous Than Airplane.

The helicopter, or vertical-rising air machine, is not an impossibility, and should a real use for such a type, or a successful one may be seen before many years, according to Dr. Albert F. Zahn, aeronautical expert for the Navy. Had there been a need for the helicopter during the war, he said, any of several types could have been perfected, of which working models have been flown.

Dr. Zahn, an expert on design and construction of all manner of flying machines. For years he has applied his time to perfection of the airplane, and is well qualified to pass upon the possibilities of the helicopter. Much interest has been shown of late in reports of successful machines of the helicopter type being perfected in both Germany and England. However, while some flights have been made, none of any consequence are reported by a machine equipped with horizontal propellers or revolving planes, designed to rise vertically from a confined space and descend on the same.

**Extra Rush in Accidents.**  
That the helicopter is possible, Dr. Zahn said, is proved by the German machine, which, rising several times to moderate heights, was observed by observers, remained almost stationary while in air and descended in safety. The machine, however, during its extended flight, such as would prove its dependability, but was tethered to the ground and, on several occasions, when the motor failed, the machine dropped and the passengers saved themselves only by leaping with parachutes.

The experiments are continuing, however, with the purpose of perfecting a motor which can be depended upon to maintain the machine without sudden failure, the scientist explained, for as soon as the engine stops, the machine cannot glide to the ground, as does an airplane, but drops vertically. In a proper descent the propellers should be rotated slowly to ease the landing.

**Best Types to Date.**  
The helicopters upon which most experimentation has been made, consist mainly of two or more propeller screws mounted horizontally on a vertical shaft, bearing engine, fuel and passengers. Equal numbers of propeller blades must revolve in opposite directions that the body of the machine may not spin like a top. The motors, tanks and body have been mounted in various positions, but the German machine has a sort of pilot car mounted at the top of the shaft over the propellers for the operators.

Whether or not this type of machine is brought to actual use, Dr. Zahn stated at least two other types of planes that may fly vertically have been offered to the government. This fact is not widely known, but is of interest. One of these, of which Dr. Zahn observed experiments with a working model, was almost identical with the present type of plane, except that mounted behind the body were two sets of air vanes, in groups, tilted at an adjustable angle, like those of Venetian blinds.

Then the power was turned on, he said, the "wash" of the air stream from the propellers, pushing against these groups of vanes, caused the model to rise gently vertically. The model was held in midair by the action, and when the power diminished it returned gently to earth. A full-size machine of the

type, he said, would be equipped with a turbine engine, in order to furnish sufficient air pressure, and when driven to a sufficient altitude, the horizontal motion would result. The plane could then fly in the usual manner, finally using the vanes again to descend vertically.

**Other Type Offered Army.**  
The other type offered to the Army, he said, was of the present airplane plan, but placed far out toward the wing ends and with vertical rudders and ailerons similar to those in use. The quicker lifting power was to be gained by having the wash of the central propeller act upon elevators at the tail of the body, while the side propellers would wash against the special ailerons on the wing tips.

When in the air, Dr. Zahn continued, this machine could maneuver as does the ordinary plane, cut figures and do "stunts" besides being able to rest motionless in any desired position in addition to the German machine, it would be vertical with nose up, if need be.

The best feature, he said, is that both planes of the new types are equally feasible and can be constructed at any time. In fact, several European inventors and manufacturers are patenting designs of the second type, he said, which is the Frenchman, Blériot, one of the pioneers of aviation.

Experts for the government, studied the second type during the war, it was explained, but the matter went no farther. The general drawbacks of their construction, Dr. Zahn said, were, first, the great cost; second, the increased weight of the machines as compared with present engine efficiency; and, third, the need of developing motors with greater power and with a greater amount of dependability. As it is, he said, a successful helicopter may be flown to any height, but the operators will never know when the engine will give a cough and die away.

**Disadvantage Overbalanced.**  
The German experimenters, however, he added, have in part overbalanced this disadvantage. It has been determined by experiment that a propeller of three or four narrow blades, caused to revolve by the air pressure resulting from a forced descent with a dead engine, will develop a much greater resistance as a solid disk of the diameter of the blade spread. In addition, the German machine is equipped with air cushions on the landing bottom so that the landing, if forced, may be made comparatively easy.

Means of steering experimental helicopters, and of which one would undoubtedly be used in a successful machine, are two. The first is a means of tilting the propeller shaft or the whole machine, when it will travel in that direction; the second being the use of vanes similar to those already described. With the latter, Dr. Zahn thinks, a helicopter sufficiently powered should be able to cut capers in the air as aviators do at present.

Any of the types advanced would in warfare be of great use in bombing or dropping, or for observation. The main disadvantage, that of being a good target for artillery fire while stationary, could be offset by quickness of movement from point to point and short stops while hovering.

Still, Dr. Zahn points out in summing up the fact that the War Department was offered such machines at a time when all resources were being expended in better or more efficient implements of warfare and rejected them, although they are completely feasible, is a sufficient indication of their war value. As to their being put to commercial or social uses, the immense expense precludes the possibility.

### ASKS \$10,000 DAMAGES.

Mrs. Marion Leighton has filed suit in the Supreme Court of the District of Columbia against Col. John B. Bennett for \$10,000 damages. The plaintiff, in her declaration, claims that on July 27, 1919, she was a passenger in an automobile at Cobbs Corners, in the town of Parispany, N. J., and that while the car in which she was riding was standing at the intersection of the roads it was run into by the car driven by Col. Bennett, and that as a result of the collision she was seriously and permanently injured.

## Masonic Washington Memorial To Vie With Other Splendors

The Masonic memorial to George Washington to be constructed on the outskirts of Alexandria, fashioned after the old Greek and Roman architecture, will compare favorably as a companion to the Lincoln Memorial. Designed as a tribute to George Washington the man and Mason, the project is being carried out by the joint efforts of all Masonic orders in this country. More than \$700,000 already has been collected and additional pledges bring the total to \$1,600,000. The structure will cost, it is estimated, \$2,500,000.

The memorial will be placed in a setting of stately trees and shrubs, carefully landscaped. The contrast of the white marble of the memorial and the green of the Potomac's banks will present a striking picture to river excursionists. The altitude of the site above the river will be 250 feet. A 200-foot tower will enable occupants to obtain a wonderful bird's-eye view of Washington and the surrounding country. The first floor will contain a heroic statue of Washington and space for documents and portraits of Masons of note, contributed by the Grand Lodges of the country. Included with these great men to be so honored are, it is understood, Paul Revere, De Witt Clinton, Benjamin Franklin, Henry Clay, Lewis and Clark, Blair, Randolph and others. The temple will be used by Alexandria-Washington Lodge, No. 22, A. F. and A. M., as its headquarters. Washington was the first mason of this lodge. The temple will be open at all times to the public, except during rituals. A museum and art gallery will be housed in rooms above the hall. Relics of Washington will be included in the museum. These will include the clock which stood beside his bed, the pendulum which was cut when he died; a pocketknife given to him by his mother as a boy; his old hour glass; the chair he used as worshipful master of the Alexandria Lodge, when it was known as No. 29, and the Williams portrait of Washington. The statue used in the ground-breaking ceremony by Louis A. Watron, president of the Masonic Mutual Memorial Association, also will be placed in the museum. Dedication ceremonies will be held early in October, it is stated. High government officials, including probably President Harding, will participate.

**BENEFITS P. O. NIGHT FORCE.**  
A bill proposing reduction of night work by postal employees has been introduced in the Senate by Chairman

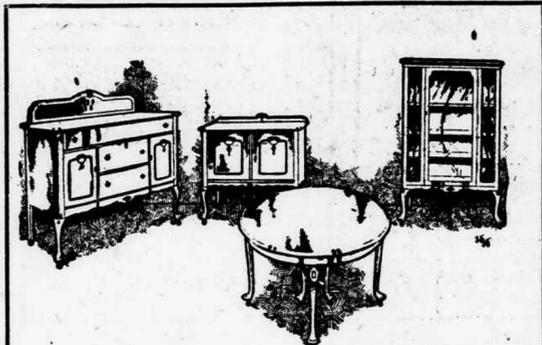
of the post office committee. The bill provides that fifty minutes of night labor shall be equivalent to one hour of day service. A report of a subcommittee on the subject, which was presented at the same time, declared that much night work is done unnecessarily.

## PAINT NOW

We will give you a perfect Painting Job at a moderate cost.  
**R. K. Ferguson, Inc.**  
Painting Dept.  
1114 9th St. Phone Main 2390-2391.

IT'S the purpose of this Store to so safeguard your purchases by limiting our stock to the most dependable values—marked at the most equitable prices—that you'll find it to your advantage to come here first—when anything is needed for the home. The privilege of a charge account is another feature of our service.

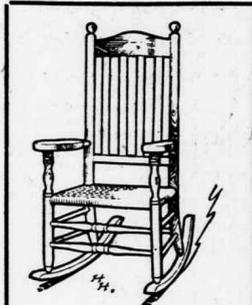
# House & Herrmann



## Queen Anne Dining Suite

(Exactly as Illustrated)

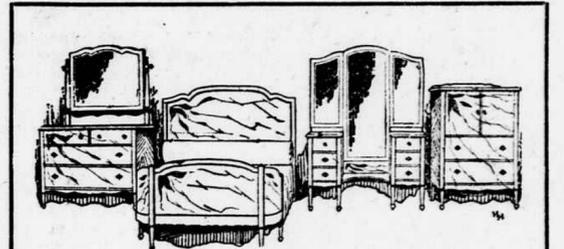
Four-piece—Either in Mahogany-finish or Walnut-finish—Buffet, with mirror; China Closet, with latticed panels; Inclosed Serving Table and 48-inch Round-top Dining Table, extendable to 6 feet. The delicate carving decoration adds a refinement to the effect that is highly pleasing. The construction throughout is exceptionally good. **\$265.00**



## Porch Rocker

(Exactly as Illustrated)

Note the comfortable, high back and the strong maple frame, nicely finished. Seat is of double weave. An especially good value at..... **\$4.85**



## Attractive Bedroom Suite

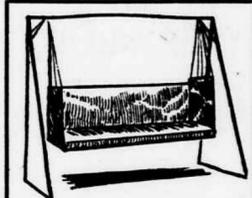
(Exactly as Illustrated)

Four effective pieces—in Mahogany finish; and also in Walnut finish—Dresser, with mirror; Vanity Case; Chiffonette and Double Bed, with bow-foot end. We can commend the details of construction—as above the standard at this price. **\$198.50**

## Buy One of These Refrigerators



You'll find it profitable to do so—for the two makes we feature—Challenge Refrigerator Co., and Alaska Refrigerator Co.—are decidedly the best; and they are rightly priced. In the assortment are five different styles, and quite fifty varieties—Top Lid, Side Icer, Apartment House, Models, Galvanized-lined, Enamel-lined, Porcelain-lined, Porcelain throughout. **\$12.75 to \$100.00**



## Couch Hammock

(Exactly as Illustrated)

Strong and comfortable—the windshield seat ends are of heavy cotton duck, khaki color; mattress, covered with denim. Link springs, and equipped with chains for hanging. SPECIAL..... **\$11.25**  
Stand and Awnings at nominal additional prices.



## Featuring Foster Ideal Spring

The Foster Spring is the spring of maximum comfort—because there's a separate and distinct spring under every inch of you—a hundred and twenty upright spiral springs conforming to the body's contour—fitting the form and supporting it. Foster Ideal Springs cannot sag..... **\$18.00**

### LANSBURGH'S EMPLOYEES TO HOLD OUTING JULY 8

Fourth Annual Picnic Will Be Held at Glen Echo—Extensive Program Arranged.

For the fourth season, the employees of Lansburgh's department store will have their annual reunion Saturday, July 8, this time having chosen Glen Echo for their place of enjoyment. Plans are in charge of the following committee: Chairman, Samuel Hart, general manager of the store; Miss J. Thrasher, Miss J. Goodman, Miss S. Tompkins, Miss L. Painter, Mrs. M. Smith, Mrs. B. Worthington, W. R. Schumucker, E. Holmes, G. H. G. Tuller, F. Quaid, F. Shelton, W. Burgess and C. Gates. One of the features of the day will be a series of games and contests, such as cracker eating contest, three-legged race, apple eating, marshmallow eating, and many others. Prizes will consist of merchandise and gold pieces, which have been donated by members of the firm and buyers, all of which are well worth trying for. All of these contests are open to employees of the store only. The time of the games and contests for which prizes will be given will be from 10 to 12 o'clock. A large panoramic picture of the picnickers will be taken at 11 o'clock. In the afternoon, from 2 to 5, the dancing pavilion has been reserved for employees and their friends, the Glen Echo Orchestra furnishing the music for the occasion. All employees will receive a ticket containing eleven coupons, entitling them to admission to attractions in the grounds as well as refreshments at the various stands. This is a day looked forward to by Lansburgh employees with a great deal of pleasure, and the indications are that the picnic this year will be the best one ever held, and that it will be a day of information received throughout the store, practically every employee, together with the families, will be found on the picnic grounds at an early hour, for all realize that the prizes offered for the contests are well worth trying for. The picnic, together with the other members of the firm, are very enthusiastic and spirit in providing a usual generous spirit in providing a

### BRIDGE SOON COMPLETED

Repairs to Calvert Street Structure Show Rapid Progress.

Repairs on the Calvert street bridge, which have been under way for a number of years, are rapidly nearing completion. The improvement now in progress, however, will include the installation of the underground trolley system, which was so urgently requested by the Connecticut Avenue Citizens Association. The Capital Traction Company has compromised in this respect to the extent of agreeing to remove the trolley poles from the center of Connecticut avenue to the sides of the street if permission can be obtained from the District Commissioners, and they are awaiting a hearing on this subject. Although persons living in that section are not disposed to be satisfied with anything but an underground trolley, they are glad that the pole hazard to traffic is to be removed. It is argued that, due to the rapid increase in population in that section, it will not be long before an overhead trolley of any kind will become a danger in the event of fire, always the case in thickly settled areas.

The citizens also contend that the present bridge is so narrow that it is bound to experience traffic congestion. They feel that in a few years it will be necessary to tear down the bridge and build a new one at which time the underground trolley should be installed. Satisfaction has been expressed at the manner in which the street car company has handled car traffic while repairs were being made on the bridge. One track was repaired at a time, north and south bound cars being switched to the single track in the way which caused very little delay, it is said.

### 1,381 ARRESTS IN WEEK.

144 Charged With Intoxication and 208 With Speeding.

Arrests made by the police the past week totaled 1,381, according to reports of Inspector Charles A. Evans, acting superintendent of police, submitted to Commissioner James F. Oyster. Continued activity on part of members of the prohibition enforcement squad resulted in numerous arrests and seizures of intoxicants and a still. Arrests were as follows: Selling, 12; transporting, 2; unlawful possession, 24; driving vehicle while under influence of liquor, 7; intoxication, 144. Members of the traffic squad made a total of 492 arrests, 298 of them being for speeding. Seven persons were arrested for driving automobiles while under the influence of liquor.

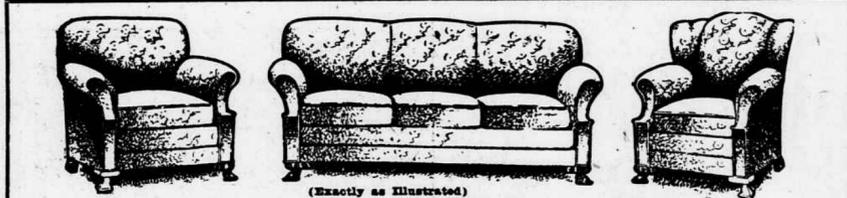
### Overstuffed Armchair



## Overstuffed Armchair

(Exactly as Illustrated)

Fire-side pattern—covered all over with either Figured Tapestry or Velour; loose cushion spring seat and spring upholstery; attractive claw and ball feet. SPECIAL..... **\$46.50**



## Handsome Overstuffed Library Suite

Of excellent construction—consisting of Davenport, Armchair and Winged Fireside Chair—covered with artistically figured Tapestry—the backs of these pieces as well as the fronts; loose cushions; spring seats. A very refined and substantial suite. Special..... **\$198.50**

### SAMUEL HART.

For the fourth season, the employees of Lansburgh's department store will have their annual reunion Saturday, July 8, this time having chosen Glen Echo for their place of enjoyment. Plans are in charge of the following committee: Chairman, Samuel Hart, general manager of the store; Miss J. Thrasher, Miss J. Goodman, Miss S. Tompkins, Miss L. Painter, Mrs. M. Smith, Mrs. B. Worthington, W. R. Schumucker, E. Holmes, G. H. G. Tuller, F. Quaid, F. Shelton, W. Burgess and C. Gates. One of the features of the day will be a series of games and contests, such as cracker eating contest, three-legged race, apple eating, marshmallow eating, and many others. Prizes will consist of merchandise and gold pieces, which have been donated by members of the firm and buyers, all of which are well worth trying for. All of these contests are open to employees of the store only. The time of the games and contests for which prizes will be given will be from 10 to 12 o'clock. A large panoramic picture of the picnickers will be taken at 11 o'clock. In the afternoon, from 2 to 5, the dancing pavilion has been reserved for employees and their friends, the Glen Echo Orchestra furnishing the music for the occasion. All employees will receive a ticket containing eleven coupons, entitling them to admission to attractions in the grounds as well as refreshments at the various stands. This is a day looked forward to by Lansburgh employees with a great deal of pleasure, and the indications are that the picnic this year will be the best one ever held, and that it will be a day of information received throughout the store, practically every employee, together with the families, will be found on the picnic grounds at an early hour, for all realize that the prizes offered for the contests are well worth trying for. The picnic, together with the other members of the firm, are very enthusiastic and spirit in providing a usual generous spirit in providing a

### WE SPECIALIZE

on school and furniture. American beatwood chairs and folding chairs carried in stock in a general line of furniture. Wholesale Furniture Exchange, 617 F St. N.W., Main 747.

Seventh and Eye Streets

# House & Herrmann

"Furniture of Merit"

Seventh and Eye Streets

## Dance to Columbia Records

Here are a few of many favorites—All 10-inch Double-disc Records. **75c Each**

- A-3595 10 in. 75c Do It Again—Fox Trot—Ray Miller and His Orchestra
- A-3596 10 in. 75c Lovey Dove—Fox Trot—Ray Miller and His Orchestra
- A-3597 10 in. 75c Every Day—Fox Trot—Ted Lewis and His Band
- A-3598 10 in. 75c Rosy Day—Fox Trot—Ted Lewis and His Band
- A-3599 10 in. 75c By The Sapphire Sea—Fox Trot—The Columbians
- A-3600 10 in. 75c Sing Song Man—Fox Trot—The Happy Six
- A-3601 10 in. 75c Teasin'—Fox Trot—Paul Biese's Orchestra
- A-3602 10 in. 75c On the Alamo—Fox Trot—Paul Biese's Orchestra
- A-3603 10 in. 75c Jimmy—Fox Trot—The Columbians
- A-3604 10 in. 75c Dinky Danny—Fox Trot—The Columbians
- A-3605 10 in. 75c —Ray Miller and His Orchestra
- A-3606 10 in. 75c Lola Lo—Fox Trot—Ray Miller and His Orchestra
- A-3607 10 in. 75c Doo Dah Blues—Fox Trot—Ray Miller and His Orchestra
- A-3608 10 in. 75c —Ray Miller and His Orchestra
- A-3609 10 in. 75c Virginia Blues—Fox Trot—The Columbians
- A-3610 10 in. 75c Dear Old Southland—Fox Trot—The Columbians



## —and play them on a Columbia Graftonola

—If you want perfect time and perfect tone. We carry all the modern and period models—in all finishes—spring motor driven. The leader is

## Type E-2, \$85

(Exactly as Illustrated)

With cabinet for records—and fitted with non-set stop device.

Terms, \$5 Cash—\$5 per Month