Nations of Old and New World Vie for Supremacy in Aviation Mounting Upward on "Wings of Commerce," World's Programme Embraces Aerial Trunk Lines to Circle Globe and Link Up the Hemispheres

BY RALPH T. FOLWELL,

U. S. N. R. F. THE world seems on the threshold of great achievements in commerdial aeronautics, if the prepara-tions under way in all the leading countries of the globe can be taken as a criterion.

The United States navy department . The United States navy department has taken up the project of trans-Atlantic flying, and, in the scramble with other nations to be first in the achievement, is bending every effort to promote aviation in all its phases. In France the government has a high commission on aeronautics work-ing ceaselessly to stimulate the ex-tension of the use of airplanes in com-merce.

morce

In this respect Italy, too, has a com-mission at work with a similar object in view.

in view. Looking forward to world conquests from the air, Germany, despite her crippled condition, has established an aviators' league of boys of from 15 to 18 and is giving them practical training in flying at 4 marks a year. From England comes the announce-ment that the government has air-planes capable of carrying 30 passen-gers and a crew of seven, traveling at 109 miles an hour at an altitude of 10.000 feet and without a stop in 10,000 feet and without a stop in

1200 miles. In Spain, too, great activity has been begun to make commercial avia-

tion a success. In Scandinavian countries an almost feverish interest in aviation has been aroused and congresses are discussing ways and means and judicial problems regarding aeronautics, and aerial trans-

portation companies are being formed. Japan, of course, is not backward in this movement and expects to rank second to no other country in com-mercial aviation. India, Australia and the big coun-

tries of South America are likewise on the alert in this field. Little Belgium, mauled, mangled, rav-

aged and in ruins, has shown the grit it is made of by establishing an aerial inter-city mail service.

inter-city mail service. Following is a more detailed account of what the world is doing for its com-merce in the air: Fifteen foreign countries actively en-

gaged in commercial aeronautics!

Italy.

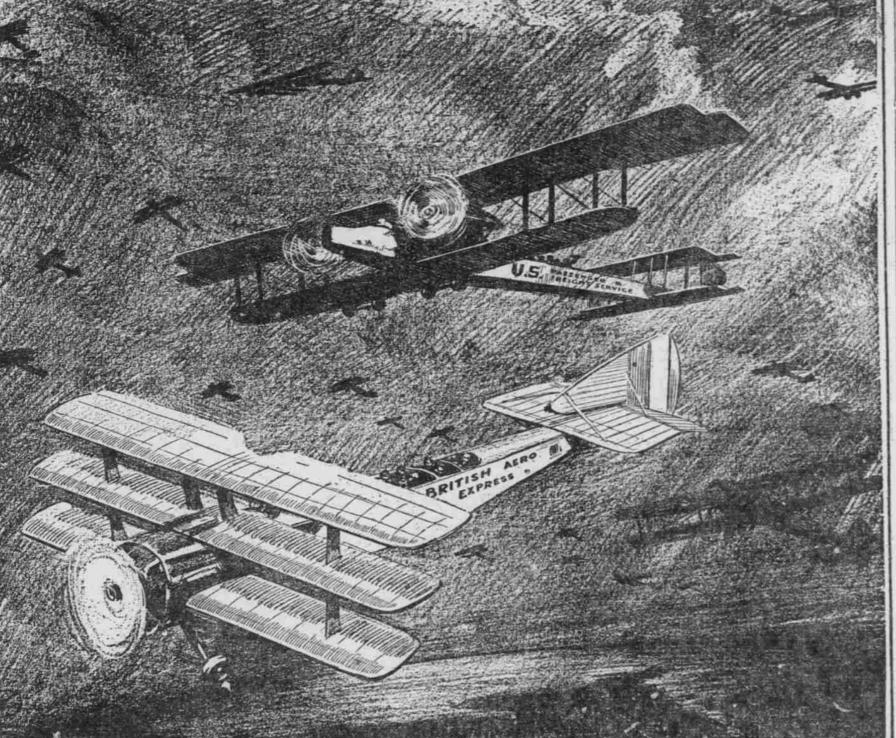
First-At Rome is quartered the "Italian permanent commission of aero-nautics," whose duties are to encourage and promote all forms of aeronautics in Itals

Second-Italy has four of the world's largest airplane plants-the Capronl, Pomilio, Ansaldo and Fiat-also more

than 20 minor airplane factories. Third—In the northern part of Italy are mmy factories manufacturing daily more than 5000 square miles of veneer wood exclusively for airplanes.

wood exclusively for airplanes. Fourth—The "permanent commission of aeronautica" has issued, through the Italian bureau of public information, this statement: "That the plans for the rigular aeronavigation between the va-rious capitals of the allied nations and that of the subsidiary lines across the Mediterranean have been officially ap-Drove

Fifth-Rome, Dec. 8 .- Gianni Caproni Fifth-Rome, bec. a.—Granmi Caproni makes the following statement: 41 am building a triplane which will accom-modate 100 passengers, with all modern comforts, cabins and beds. When suf-ficient planes have been built to form a flottilla I shall sketch out ap itinerary for each one to take. For the present



When English and American commercial carriers sail over the seas together.

company of bankers and other men of affairs, who met in order to form a combined national association to se-cure the widest financial help for an affort to raise aviation in Japan to the level of other countries. Indin. Simia, Oct. 14.—The government of India is planning to establish an aerial cervice in India. Matralia. Tans are made for the formation of a company to operate air lines be-tween the chief cities of the differ-ent Australian provinces and also to London. Passengers and mail will be

Passengers and mail will be in that region. Eighth-Captain Benjamin B. Lips-

London. Passengers and mail will be carried.
 Brusnels, Dec. 1918.—The government has established aerial mail service, stattenders of rits intercity correspondence.
 Brazil
 First. Aerial mail service will be inpurchable government has granted this spring between all prheipal Brazilian cities.
 Second. The government has granted the seconcessions to a corporation allowing it to develop aviation for aerial mail take over the company.
 Chile.
 Santiago, Chile.—Ait a New Year's celebration a ceremony marked the innuguration of an aerial mail service between Santiago and Valparaiso.
 Tirst. Home of the most powerful and efficient airplane edugine in the world.

First. Home of the most powerful and efficient airpiane engine in the world. Ninth-Curtiss will operate an air inc. beginning this spring, between New York city and Atlantic City. The service was built and tested, more than 19,000 of them had been delivered to the government. The "Liberty Tweive" develops 400 horse power, a great fac-tor in commercial aviation. Tenth-The Aero Transport company,

chereiops 400 norse power, a great factor in commercial aviation.
Second. Home of the first successful heavier-than-air machine ever bullt and flown. The Wright bothers, on December 17, 1963, at Kitty Hawk, N. C., made a 53-second flight in the first flying machine ever under full control and driven by a gas engine. Third. Home of the two greatest factor clubs of America and the Aerial League of America. Through their untiring energies more has been done and is being done to encourage and stimulate aeronautics than by any other two similar organizations in the world. For proof of this, turn to their records at their headquarters, 297 Madison aven use. New York clip.
Fourth. Two asrial mail lines now
In Conclusion.

Fourth. Two aerial mail lines now wunning on schedule time-New York ity to Philadelphia, New York city to Washington, D. C. Two in an experi-Commercial flying is coming on with making strides in every civilized coun-ry. All foreign countries now engaged on it are receiving governmental sup-port, financial, judicial and technical, mental stage of operation-New York city to Boston and New York city to Cleveland and Chicago. Plans for 52 Every encouragement is given design-ers, engineers and inventors to bring about the most efficient commercial types of planes. In the United States the government of present to see the set of the s new airplane postal service lines are new airplane postal service lines are able plans for inauguration. Fifth, Fight definite airways con-

necting all the states in the union have been mapped out and officially approved. They are: (a) The Woodrow Wilson Airwayapproved.

at present is not offering such en-couragement and has been restricting designers, engineers and inventors to ounders, engineers and inventors to military types of planes. If this should continue, our country will fall back at least ten years in commercial avia-tion as compared to countries having government support. It is to be hoped this drawback will not be permanent in the country of countries for avia-tion is control to size to be been the woodrow wilson Airway—
 From New York city in a direct west-erly course to San Francisco, touch-ing all the chief intermediate cities.
 (b) The Wright Brothers Airway—
 From Washington, D. C., in a southwesterly course to San Antonio, Tex.

Fith-come, Dec. 8--Glanni Carrow, makes the following statement: Carrow state to passangers, with all moders of the passangers with all the passangers with with the the passangers with with the the passangers with all the passangers with all the passangers with with the there all the passangers with with the theresthere all the passangers with with the there all the passange

cessible from all sections of the city.

In Conclusion.

Second-Paris, Nov. 17.-The French government is contemplating the cre-ation of about 29 nerial lines connecting Paris with the chief cities of France

and the great foreign centers. Third-Paris-London aerial mail service inaugurated last June by Mr. Fourth-France is the largest pro-

ducer of one of the three greatest airplane engines, that is, the "Hispano-Suiza," having at the time of the sign-ing of the armistice 17 factories deoted exclusively to the production of this engine

Fifth-Four of the best-known makes of airplanes are French-the Caudron, Salmson and Breguet. the designs for the well-known De Haviland came from the famous French designer, Captain Geoffrey de Haviland. Germany.

First-In Germany. Flying league known as the "Deutsche Fliegerbund," which, just as the "Ger-man Navy League" was influential in giving Germany a powerful navy, is ex-pected to promote the German aim in "the next war" of conquering the world from the air. Flying schools are to be established for the "theoretical and | kind obtainable. practical" instruction of hove from 15 There are many books on methods of to 18 years old. The training will be carried out by means of model air-planes. The monthly fee will be one raising fruits and vegetables, with descriptions of varieties of each suitable mark, about 25 cents. "Practical" training at 4 marks a year. Second-Air traffic has begun befor planting anywhere in the United States. Every seed catalogue extels

tween some of the largest German towns. The planes carry parcel post passengers. The passenger rate is hardly know which to choose as best marks a kilometer, or about 94 for us at the time and in this climate. and passengers. Third-From a British official who

Third-From a British official who has visited Staaken comes this state-ment: "At Staaken, just outside of Ber-lin, an airplane for trans-Atlantic flight is now under construction. It has a wing spread of 19s feet and en-gines developing 3000 horse power." Fourth-This same authority states that at the Compelin factory at blied

that at the Zeppelin factory at Fried-richshafen, which he visited, another transatiantic plane is being built which has nine engines, eight propellers and ill carry 100 passengers. Fifth-While at the Zeppelin factory

they related to him the story of a re-markable Zeppelin flight as follows: At 8 A. M. on November 21, 1917, a Zeppelin with a crew of 22, carrying 25 tons of munitions and medicine, left Jamobli, Bulgaria, for German East Africa On the night of November 22, 23 dens in Portland and vicinity. These lists I combined very carefully into the most authentic advice ever Africa. On the night of November 22-23 Arrieal On the hight of November 22-25 [5] filled the high additional addite additional additional additional additional additional All the recommendations that I shall

airship came back to anchor at Jamboll at 8 A. M. on November 25, being four days in the air without a stop or a be based on this list. landing. The visitor was told by Herr Rasch, managing director of the fac-tory, that the ship was capable of go

ing from Berlin to New York and back without a stop. The same authority further

of fruits. reports that at Staaken he saw great airplanes of five motors, each devel-oping 250-horsepower and driving five propellers. They have a wing spread of 140 feed, carry a crew of eight and 2840 pounds of useful load and can stay up 14 hours at a speed of 81 miles an hour. These are to be used for These are to be used for I have not space to urge you to plant all the kinds of fruits that you possierial transportation between London,

Seventh-Germany is making enor-bly can in your gardens. I am taking to secret preparations to secure mastery of the air. German insurance tremely desirable it is to have an asmastery of the mir companies are seeking cover in neutral sortment of all the kinds of fruit your

and 30 passengers to a height of 10,000 hour.

and 30 passengers to a height of 16,000 feet, travel at 100 miles an hour, make a nonstop journey of 1200 miles and hour, make a nonstop journey of 1200 miles and it following the coast and touch-alight on the sea and rise again with a full load." Second — London. — The first aerial commercial service in Great Britain is already in the last stages of develop-ment, with the initial route connecting will make about 120 miles an hour. Third—London to Paris air service. Will make about 120 miles an hour.

will make about 120 miles an hour. If al trans-Atlantic flight. The first entry Third-London to Paris air service lodged with the Royal Aero club was eady to be inaugurated. The Ritz on November 15, by the Whitehead Air-

Hotel, Piccadilly, is the English ter-minus and the Ritz Hotel, Place Ven-dome, Paris, is the French terminus, with four propellers, each driven by a

Large machines capable of carrying 49 Sixth.

Helangfors, Finland, Sept. 28. ing every city on the coast and touch-

reaft industries. Frince Axel is captain-commander of the Danish navy and also an aviator since 1912. Second—On April 26 and 37 an inter-Scandinavian conference on aviation Aviation associations, and a large

Chats With Home Gardener?

D EAR FRIENDS: Today I have for planted they are there to stay, and they kind, then Marshall, Marvel, Magoon and Superb in the order named. (Personally I would vote for Ma-I have ever given you, and it as vegetables,

bearing with me last summer).

Best Varieties of Raspherries.

The first list was what they con- I In red raspberries the favorite for idered the most desirable fruit for our, the home garden is the new Superlative, large, productive and early, close second is the old standard Cuththe merits of various vanicies to such is the store of the store second is the second

a fall crop extra. In black raspberries or ",black caps" n which they were deemed desirable, and this is the way the combined ver-

all Oregon's most popular variety for native to Oregon, is also recommended. It bears continuously from July to No-vember, and the berries are large, sweet

and delicious. It is a very rapid climber, with beautiful foliage and very ornamental and desirable to cover an unsightly fence, rockpile, et cetera. The Lucretia dewberry is re-mended as a large-fruited variety recom ning the last of May. It has no hard

Best Varieties of Loganberries

All seedsmen unite in recommending the Burbank Phenomenal as the best variety. One good vine will give you a surprising amount of fruit. Every-one knows how fine it is for juice and jelly, but few people know that the

Jelly, but few people know that the loganberry, being such a soft fruit when fully ripe, is always picked for market before it is ripe, when it al-ways remains sour. But if you have a loganberry whe of your own and let the fruit remain until it is very dark purple and fully ripe it is delicious for table use. Here is a case where you

you raise it yourself.

Again all our seedsmen unite in rec-ommending but one variety-the new "Perfection." It has large red berries. few seeds, very prolific. Plant a few bushes for jelly if you can.

Hest Grapes for Homes.

countries to insure a great chain of amily likes. By planting these around the favorite variety, easily leading all statue of this commended. Of all varieties the borders of your garden and lawn, others for home garden use. Next stations. Factories in Germany are they take up very little room, once comes Progressive, an ever-bearing which do not drop off like others. The the beautiful and well-known Spitzen- mit of Mount Rubidoux, near here,

variety has few seeds and is a long keeper. The old popular Concord is the second choice. Both ripen in August. However, we are assured that any keeper. The old popular contrained in August, second choice. Both ripen in August, However, we are assured that any eastern grape will do well here, so if you love the old green Niagara or the delicious native Delaware, with its lit-the trad clusters, plant these, or any other old favorite. Remember that our climate does not raise the thick-fieshed "California" grapes. The Flame Tokays

The Crawford is first choice, both them in the Williamette valley. Above all things plant at least one or two grapevines of some kind-even if favorites and well known to us early and late varieties being prim

you substitute them for a couple of Next the familiar Alberta and the later your climbing roses or wisteria. No Muir. All the above are freestones, vine is more beautiful at all seasons Hale's Early, a semi-freestone, is recthan a grapevine and no fruit more ommended as a very early while delicious or healthful.

delicious or healthful. If you plant gooseberries plant the Peach trees grow so readily and beat so soon that they are most desirable to grow. Plant at least one peach they

The Best Plum Trees.

For the home garden the peach plum s first choice-large, red, ripening in August. The second recommendation is the old favorite damson, small purple, ripening in September, but any personal but this is because of lack of space in favorite can be substituted.

Oregon's Best Cherries.

your fruit, it will give you deliciou fruit to eat fresh, to can or to dry. The Do you know that the finest cherries the world originated in Oregon and Tilton is the variety recommende nowhere else do they flourish better The Royal Anne is the favorite with narket and home; large, productive and arly. The domesticated Evergreen, yellow with red cheek, ripe July Next is the Lambert, deep red, ripe the niddle of July. Then the Bing, black-late July. A tren of the tish or early Richmond sour cherries

is also recommended as "pie cherrics, (but 1 have never eaten better pie that the sweet Bing or Black Republican make). Our Best Pear Trees.

The well-known Bartlett is acknowl edged to be "the beet summer pear in existence." Of the fall pears the Winter Nellis is the favorite and especially adapted to this valley. It is a wonderful keeper. I ate some delicious ones

esterday which were kept from last I learned to know fine pears in the few. Put in one layer, placing them so the

will not be erect nor lying on the ground, but at an agle between, all in the same direction. Pack the dirt firmly about the roots

if you possibly can.

Apricot Trees.

apricot tree after planting the rest o

If you have many trees or bushes and little space, you can add other layers above, with well-packed earth between each, and bank up over all the roots B\$ this method your trees and bushes will keep in the best condition until

Statue of Christ to Be Chiseled.

Beauty Treatment to Believe the Face of Pimples, Black-

heads, Etc.

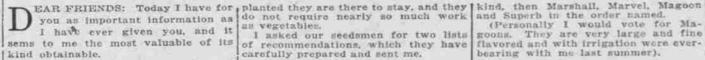
Send for a Free Trial Package.

Tilton is the variety recommended. Let me urge you again to study the foregoing list and select at least a few kinds of fruit to plant this spring. Every garden in the dity should have a strawberry bed. Strawberries will bear the first year. The plants can be net exit a little later, when the ground is in good shape. **Heeling in Fruit Trees.** Now is the time to select some new hush and tree fruits. Buy what you want, take them home and "heel them in" until you are ready to set them out, when the ground has dried out and is ready to be worked. To do this select a well-drained spot where the soli is mellow and dig a little trench long enough to lay the roots of all your fruit trees and bushes along side by side if you have only a . Put in one layer, placing them so they





The natives of Siam obtain petroleum by digging pits about 60 fect deep and dipping it out with pails.



The Best Small Fruit. ome gardens to raise for home use. It was to be understood in this that all

for you all understand that a certain the list should have great weight with kind of fruit or vegetable that would do well in our mild, moist climate would not do well at all in a dry farm-

ig section, or in many high, cold lo-

dict stands for small fruits: 1. strawberries; 2. raspberries; 3. blackberries; 4. loganberries; 5. cur-rants; 6. grapes; 7. gooseberries. All the seedsmen united in placing strawberries first and in placing rasp-berries second, but were not in com-Also that many of the varieties rec-ommended as the finest for our home gardens would not "stand up" to be problem. Vegetables Recommended. Last year each of our five local seedsmen carefully prepared for me a list of recommendations to serve as exported for market; with many other considerations which enter into this

The Best Fruit Trees. This is the order in which we were

recommended to set out fruit trees, putting out one tree of each and just as nany as we could find room for in all he land we own. A fruit tree is often ust as ornamental as any other small ree which we use in shrubbery and to one realizes who has not tried it

give you from time to time as to the best varieties to plant this year will ow much finer fruit is picked off your own trees fresh and clean just as it ripens. The most desirable are: (1) plums, (2) cherries, (3) pears, (4) prunes, (5) apples, (6) peaches, (7) ap-

Plant Fruit in Gardens.

Today I have for you an even more important summary of the advice of our seedsmen, in that last year's list was of vegetables and this year's is

All were agreed on plums as best and cherries next, but pears and prunes were practically tied for third place and If we find we have made a mistake apples and peaches were nearly even in favor after them, though one seeds-man preferred apples to all other fruits

with lists of recommendations of the best varieties of each fruit to plant which are extremely valuable. Combined as before they are as follows:

Of strawberries the New Oregon i

Best Garden Strawberries.

table use. Here is a case where you

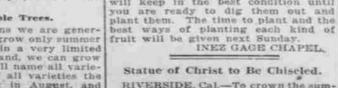
Best Garden Currants.

table use. Here is a case where you of all and a general favorite-large dark-purple. The Petite is also rec-

very productive. The Best Apple Trees.

In our home gardens we are generally recommended to grow only summer

or autumn varieties in a very limited area. Having more land, we can grow more varieties. I will name all varie-ties commended. Of all varieties the



Rogue river valley, which grows the finest in the world, it is claimed. There the Buerre d'Anjou and the Beurre Chairgeau were among the finest (Beurra meaning a soft buttery pear). Our Best Prunes. The Italian prune is the first choice ended-small, purple, sweet and