FLYING BOAT MAKES BEAUTIFUL SHOWING IN HANDS OF PORTE

Wanamaker Hydroaeroplane Shows Perfection In Every Details-

Worth of Two Motors. The trials demonstrated clearly the worth of two motors, each hitched to a propeller. Two propellers, operated by separate motors, is rather an un-usual method in this country and not often employed abroad, but it appears to the the construction of the future. Even when there was a slight variation in the number of revolutions per min-ute between the two blades it had ab-solutely no effect upon the steering controls. It was about 3:15 o'clock when the controls, having been adjust-ed, the work of sending her off the ways up which she had been hauled to complete the last few jobs, began. It was just 3:30 o'clock when Mr. Cur-tiss and I took our places in the cabin. On the top, in the engine section, stood tiss and I took our places in the cabin. On the top, in the engine section, stood George Ballett, my assistant pilot, and two of the Curtiss skilled workmen, George Robinson and James Lamont. Pushed out clear Hallet turned our en-gines over. The left was stiff and took a bit of cranking. The right started before its mate but even with that pro-peller going hard, we were able to keep her nose straight by warping the ruder nose straight by warping the rudder. When the left engine came in she When the left engine came in she seemed to gather up under us like a race horse at the starting post. When the shot forward, plowing through the water at first, until her speed made her rise to the surface. At the outset that fault, more apparent than real, was conquered and we found ourselves traveling through the lake, or on it, at something like 40 miles an hour, Cur-tiss at the whel. He felt that it was his duty as the builder to see that at least she showed ability to perform the elementary part of the job for which the had been constructed. Both he and I were rather familiar with the type of control that is being used tin America. control that is being used tin America. I have been used to steering with my feet and working the allerons with my hand. In this craft I steer with my hands and work the allerons with foot power. We sped along for about three-quarters of a mile. Mr. Curtiss made no effort to rise although she strained under us as if anxious to get up in the air. We stopped and Robinson and La-mont got into the work boat that fol-lowed. Then we started again. We were more at home in her by now and Carties shot her ahead at a good pace ntrol that is being used tin America. Curtiss shot her ahead at a good pace and at 3:35 o'clock she left the sur-face of the water and flew.

or afferons at sufficient angles to show us what she could do when it becomes necessary. It is a rule of Mr. Curtis and other good builders not to try sharp turns during the early flight. The boat has to first find herself before the more difficult manuevers are gone though

with. Runs Easy As Liner.

Runs Easy As Liner. We about faced nicely, the rudder working like a liner's and then started home. This time I put her through some of her paces. We flew through about 40 degrees of a cycle steering from side to side and climbing and de-scending with a prediction that me

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Devil Spots.

By Julius Muller in the Century. The most important advice that I can give the northern stranger who visits the Carribean tropics is this: If you are walking along a West In-dian road at night and step suddenly on a warm spot, leap away from it at once. A devil has been lying there

once. A devil has been lying there asleep. The devil spots are so warm that they can be felt by the bare feet of the natives, and a West Indian's soles are a bit tougher than ordi-nary boot soles. Even West Indian surgeons have a mild scare some-times when they find how deep they have to cut into a bushman's foot to reach flesh. reach flesh.

Last year we lived near a road that was a regular dormitory of devils. When we sat on the veranda at night we could always tell where they were lying whenever a file of natives came padding along with their swift glide. padding along with their swift glide. The leader suddenly would check him-self, sidestep swiftly, and glide on. Without a word the rest would follow suit. There always is a file of natives at night in the West Indian islands.

Richest Woman In Kentucky Takes Up Husband's Affairs



MRS. MAYO, HER CHILDREN AND HER HOME.

In the little town of Painstville, inishings, some of which came "om Johnson county, Kentucky, lives a over the sea, cost in the neighborhood woman upon whom the eyes of the of a quarter of a million dollars. Mrs. whole state are fixed. She is Mrs. John Mayo will fit up offices in a part of this whole state are fixed. She is Mrs. John Calhoun Mayo, widow of the richest man in Kentucky, who died of Bright's disease in New York recently. Mrs. Mayo is now the wealthiest widows in the central west, and per-haps the most interesting, since she is to take up the gigantic business affairs left by her husband and carry them out. Mrs. Mayo's wealth, consisting principally of vast tracts of timber and mineral lands, is estimated at \$20,000,-000. She has two children to help her big nome and there, with the assistance of secretaries and experts in the various lines of work her husband was interested in, will carry out what she believes he would have her do. Mrs. Mayo is probably 45 years old, though she does not look it. She has a keen grasp of affairs and her counsel was always sought by her husband in business deals. These confidences en-abled her to step into his business shoes with more readiness and ability

mineral lands, is estimated at \$20,000,-000. She has two children to help her enjoy it. They are John, aged 13, and Margaret, aged 8. The Mayo home, where Mrs. Mayo will conduct her business, is the handsomest in eastern Kentucky. Its buildings and surroundings, with furwhen the time came that she must succeed him. Those who visit her of-fices find there a calm, keen-eyed busi-ness woman, thoroughly capable of looking after her own affairs—a most gracious lady socially, a most tallented woman in a business sense.

CARE OF BABIES.

In the last 20 years infant mortality has been reduced in this country 50 per cent, and it is probable that with the spread of our knowledge concerning babies the next 20 years will see the present mortality, which is still appall-ingly high, cut in two. The lessened death rate has come theat next set much from improved

about not so much from improved methods of treating diseases as from about not so much from improved methods of treating diseases as from the successful endeavor to prevent disease. It is by means of preventive measures that the fight against sick-ness is to be won. It is simpler safer, and more economical to keep the baby well than to cure the baby. Keep the baby well and you won't have to cure him. Our endeavors to prevent disease in babies should be directed along three lines hygiene, diet, and protection from infectious diseases. The environment of the baby has much to do with preventing disease. the well ventilated room with an abun-adance of sunlight and protection the new read of sunlight and protection along three lines hygiene, diet, and the environment of the baby has much to do with preventing disease. the environment of the baby the baby the baby has much to do with preventing disease. the environment of the baby has much to do with preventing disease. the environment of the paper diseases. the to do with preventing disease to the protection the to do with preventing disease. the to to do with preventing disease to the to to the protection the to to do with preventing disease. the to to do with preventing disease to to the to the to the to the to the to the protection the the first injection, theoretically, the man the second injection, 10 days later,

should be provided. A daily bath with careful drying of the skin is no longer considered a luxury but a need. There is a superstition that daily baths are weakening, but the opposite is the The baby's mouth should be left alone until the teeth have plerced the gums-there is danger of injuring the delicate mucous membrane of the baby's mouth—but when the teeth have appeared a small tooth brush is of the greatest service in preserving the teeth.

BLOOD PRESSURE TESTS

BY DR. W. A. EVANS.

to his fingers. He may notice that the pulse is fast and bounding, or that it is slow and soft. In this simple test he has been making a crude effort to determine the blood pressure and to discover the rapidity of the heart's ac-tion tion

The second half of the test, deter-The second half of the test, deter-mining the pulse rate, developed about as far as it could be developed when the use of watches with second hands became general. The determination of became general. The determination of blood pressure was a guessy perform-ance until a few years ago when simple instruments for its measurement began to be generally used. We have learned more about blood pressure in the last 10 years than in all the preceding his-terw of the world combined and the

To years than in an the preceding ins-tory of the world combined, and the probability is that the next 10 years will teach us more than the last 10. The blood pressure apparatus is a means of measuring with a mercury column the impulse which, when felt with the finger we called a bounding column the impulse which, when felt with the finger, we called a bounding pulse or a soft pulse, as the case might be. The blood pressure apparatus con-sists of an unelastic cloth band, within which is a hollow rubber tube, similar to an automobile tire. The inner tube is connected on the one hand with an air pump and on the other with a col-umn of mercury and a perpendicular scale. scale

scale. The band is fastened loosely around the bare arm. The inner tube is blown up. As the band will not allow expan-sion externally, as the tube inflates it must compress the arm. The inflation is continued until the pulse cannot be felt at the wrist. In the meanwhile, as the pressure on the arm increases, the mercury is forced up the perpen-

the mercury is forced up the perpen-dicular tube. When the pulse disappears the amount of pressure is shown by the height to which the mercury has mounted. We speak of 120, meaning that the column of mercury has rise dicular tube. My hen the pulse disappears the amount of pressure is shown by the height to which the mercury has mounted. We speak of 120, meaning that the column of mercury has risen 120 millimeters, or about 4.7 inches. Some of the blood pressure apparat-uses, instead of using a column of mer-cury as a recorder, make use of a dial and hand, somewhat similar to the ar-rangement of a water gauge or steam pressure recorder. When the brachial artery, the artery of the arm, is pressed artery, the artery of the arm, is pressed artery the next the level of the heart. A change in posture from the erect to the horizontal causes an increase in the blood pressure. If one lies down the blood pressure. If one lies down the early hours of a heavy sleep, and the argadually rises through the night. Early the next morning it is still low. During the day there is a gradual rise, and the maximum is reached late in the day. The range from deep sleep and hand, somewhat similar to the ar-rangement of a water gauge or steam pressure recorder. When the brachial artery, the artery of the arm, is pressed on until caught between the bone and the inner tube, no blood can flow into the radial artery, and in consequence the radial artery, and in consequence Blood pressure then is the amount of pressure or squeezing necessary to ap-ply to the arm to collose the brachial artery. The pressure applied to the skin is transmitted the artery without losing force. Therefore the measure of the pressure in the inner tube is a high press

the pressure in the inner tube is a measure of the tension of the blood in the artery. The blood in the artery is pressing out against the blood vessel wall with exactly the same pressure as that shown by the column of mercury to be the pressure in the inner tube

to be the pressure in the inner tube. What makes the blood in the artery press out? When the heart contracts press out? When the heart contracts i it forces the blood into the arteries. The elastic arterial walls squeeze the blood to keep it moving forward. The amount of heart squeeze plus the i amount of wall squeeze is just equal to i the amount of force necessary to push the blood through the small vessels, capillaries, and veins back to the heart 1 again. If it were not for the pres-sure of the blood in the vessels little no force would be required to collapse an force would be required to collapse an

artery.

The large artery coming off the because its discoverer thought it carried air. It was thought to carry air because after death it was found to be a great round tube nearly empty of blood and partly filled with gas. The aorta has a wall stiff enough to make it remain round and uncallapse them empty. This, however, is not true of the smaller arteries. Drain the blood pressure of the store and the sphygmomanometer (the blood pressure is a measure of the blood pressure. When here the artery and not a measure of the blood pressure. When he store the shood pressure is a measure of the blood pressure is mate, the examination he knows that, if no blood pressure was taken you have ever watched when the blood pressure was taken you have ever watched when the blood pressure was taken you have a pluse beat and down between the blood pressure is a no further need now is a better analysis and a better understanding of the artery and not a measure of the blood pressure is a deter analysis and a better understanding of the artery and down between the blood pressure taken. What we need now is a better analysis and a better understanding of the street was taken you have the pressure read not a measure of the blood pressure apparatus. If an index pressure readers the place the street analysis and a better understanding of the street to a statem pressure readers the place the street analysis and a better understanding of the street analysis and a better understanding of the street to a street analysis and a better understanding of the street to blood pressure taken.

When one puts his fingers on the wrist he "feels the pulse." He notices a little triphammer stroke transmitted to his fingers. He may notice that the

Gibson has formulated a rough way of estimating the force of the heart beat from the blood pressure. His rule is that one-third of the blood pressure, or systolic pressure, is due to the pulse pressure and two-thirds to the diastolic

pressure of 100. This is the normal re-lation.

It may vary materially, and there is where one of the dangers from cepting blood pressure on its cepting blood pressure on its lace without further analysis comes in. For instance, there may be an increase in resistance in the vessel walls, but at the same time heart disease may be present. The resistance would increase the diastolic pressure, but the limping heart would nump less effectively than heart would pump less effectively than normal. In consequence the pulse pres-sure would be relatively decreased; the

sure would be relatively decreased; the normal relation of pulse pressure, 1; diastolic pressure, 2; to systolic pres-sure, 3, would be disturbed. Outside the variations due to age and disease, there are variations called physiological. There will be a variation according to muscular strength of 5 to 10 on each side of the normal. A physically weak person will have low pressure, and a physi-cally strong one a high one. Obesity adds a little to the blood pressure. Active exercise will add 29 to the blood pressure, if the record is made soon thereafter. A full meal will in-crease the pressure should be taken sitting upright, and the cuff on the arm should be at the level of the heart.

the day. The range from deep sleep to shank of the day may be as high as

40. Pain, anxiety and violent emotion cause sharp rises. Excessive draughts of water will raise the pressure 5 to 10. Large amounts of beer cause a marked rise. Strong alcoholic drinks cause a sharp short rise.

Habitual drinkers develop a chronic high pressure, not much augmented by a single drink. Excessive smoking during a short period of time causes a rise of 20. Habitual smokers usually have a low pressure. ave a low pressure.

have a low pressure. For several years we have been hearing much about blood pressure. Average men have heard of it, and a fair proportion of them have had one or more blood pressure examinations. The insurance companies want to know the pressure of those whom they insure. The companies who offer their insured a periodic examination inknow the presence of the provided of the provided a periodic examination in-insured a periodic examination in-clude a blood pressure examination. Cabot is quoted by Faught as fol-

lows: "If I were allowed only two instru-ments of precision for my aid in physi-cal diagnosis they would be the stetho-scope and the sphygmomanometer (the

Skips Along Like Rock.

Like the rock of legend, she climbed r 20 or 30 feet and then went on for 20 or 30 feet and then went on about her business on even keel. Then we came down again and she slid along the water as gently as a bird. We went the storped. **bout a** mile further and then stopped. We turned slowly around and picked up quickly and flew back, making two

jumps on the run home. We found her elevators worked amoothly. Her engines were singing truly and in unison. The ailerons kept smoothly. Her engines were singing truly and in unisch. The ailerons kept her baianced to a nicety. The wings lifted powerfully. In short she was a success. Reaching the landing stage Curtiss alighted and 1 took the wheel with Hallett by my side. We put in a 100 pound bag of ballast and took on a 200 pound man who stood up on the en-gine section to observe the motors in action. Then we tried our second flight and this time she did even more than was asked of her. I wore a helmet and flying overalls and Hallett wore his overalls too. It was just 4:10 when we pushed off for the second trial. She got under way with amazing rapidity con-sidering the stiffness of her new en-gines and in a few hundred yards she had left the water for the air. I let her down again and stopped the en-gines to test them out. They started again easily, upon cranking and we went ahead getting up to 50 miles an hour when she took the air. She went straight and true answering her helm as easily as a toy ballon is pulled here and there by a string. We shot up about 100 feet and then continued at that elevation for about three miles. flying in a straight line. Behind and over us the motors sung with a sure-mess of timing that delighted our ear us the motors sung with a sure-of timing that delighted our ear? **ness of timing that delighted our early If Curtiss has done nothing else he has built two fine motors.** I depressed her **and we came down as easily as a leaf.** It **In this flight I had taken her but lit-the out of a straight coarse. We tried no banking but we used our wing flaps** I

"Three years." "How long do you suppose it took me to learn to be a manager?" 'I don't know."

"'Well, nearer three times 10 than three years, and I am still learning. You writing fellows never want to learn your trade, like other people. You talk about inspiration and uplifting the public, and all that, and you want to do it in six months. You go to work on this new idea, and come back here when you've finished it. Then it will be time enough to talk about my end of it."

WORK OR FEE?

By Ruskin. If your work is first with you, and your fee second, work is your mas-ter, and the lord of work, who is God. But if your fee is first with you, and your work second, fee is your master, and the lord of fee, who is the devil.



A Great Comfort.

Father—I suppose you know, Susie, that in keeping you indoors I punish myself, as well as you. Susie—Yes, sir; that's why I don't

mind it.

The eyes require no special attention after the first day of life, nor do the ears. The nose should be washed gently with a very moderate solution of table salt in the water. Of the greatest importance is pre-venting discose in a retional dict for

venting disease in a rational diet for the baby. The infant has a restrictive tolerance for food and if the tolerance s exceeded it is with hazard baby. The one rational food for the infant is mother's milk and every effort should be made to obtain this food. Infants nursed at the breast have a ower death rate than artificially fed babies, and they resist sickness much etter

Stated in figures, the bottle fed baby is in 10 times more danger than the breast fed baby. The baby should be nursed at regular intervals. The pursing should be continued for the greater part of the first year, though it is advisable to give the baby one bottle of artificial ford and the baby one bottle of artificial food about the baby one bottle of artificial food about the fourth month, not so much as a welcome re-lief to the mother as getting the baby accustomed to this means of taking artificial food, which may be difficult to do at a later period. Weaning should be accomplished gradually and according to the indi

radually and according to the indi-vidual condition. If the baby cannot have human milk, the greatest care should be exercised in selecting arti-ficial food. Cow's milk such as is sold in this country as certified milk should selected and then modified so as to resemble as nearly as possible human milk and at the same time respect the restricted digestive power of the baby. Lastly may be mentioned the prevention of infectious disease. Keep the baby away from every sick person rigidly isolate every one suffering from a contagious disease: disinfect all the excreta from the sick and destroy all the effects which may have come in contact with the invalid.

contact with the invalid. It is not generally appreciated that the seed of tuberculosis is usually sown in infancy, but such is the case. Knowing that babies are especially sensitive to tuberculosis, they must be protected from every source of infec-tion, both human and bovine. It is not possible within these limits to do more than to enumerate some of the meas-ures of preventing disease in babies. ures of preventing disease in babies. but if our thoughts can be directed to the prevention of sickness, victory in our fight against infant mortality is assured.

Eleven miles of subways are being considered to solve Liverpool's con-gested traffic problem.

woman in a business sense

ARMY NO LONGER FACES SPECTER OF TYPHOID

Jack London in Collier's. The United States was the first coun-try to inoculate its soldiers and sailors against typhoid, and it is safe to as-sume, no matter in what other ways its soldiers may lose their lives in Mex-ico, that none will die from typhoid. This inoculation is a fairly simple matter. The serum is hypodermically injected into the arm in a series of three injections, the intervals between injections being 10 days.

has had reduced the 100 per cent of his non-immunity to typhoid to 32 per cent. The second injection, 10 days later, consists of 1,000,000,000 nicely dead carcasses of the disease. Also it re-duces his non-immunity to 3 per cent. The third injection introduces another 1,000,000,000 of the same ably efficient carcasses and reduces his non-im-munity to zero. In short, when his body has become the living cemetery of 500,-000,000 more dead bodies than there are live humans in all the world, he has be-come so noxlous to the particularly nox-ious and infective typhoid that he may be classed as a positive immune. It is very easy, the actual process of inoculation. I have had the pleasure of reducing my non-immunity of 100 per cent to zero per cent. The first inoc-ulation was perpetrated in a transport hospital, the second in a captured acad-emy turned into an army hospital. The third in a field hospital. The stab of the hypodermic syringe, different from ad-ministering morphize just under the skin, goes straight down and squarely down into the meat of the arm for half an inch, but the pang of the stab is over the instant the skin is punctured. It is only the nerves of the skin that protest in either case. After an inoculation there is no in-

only the nerves of the skin that protest in either case. After an inoculation there is no in-disposition. The arm is a trifle sore for several days and that is all. Some in-oculatees aver that they awaken from the first night's sleep with a dark brown taste in their mouths. In rare cases a mild increase of temperature is noted, reaching its height some six hours after the inoculation and fading quickly away. I have takked with a daring one who took the total quantity at one time, and who stated that the impact was equivalent to a man's fist between the eyes, and that he was not quite himself again for all of the 24 hours. But the big thing about the whole af-fair is the statistics. Individuals do not

But the big thing about the whole af-fair is the statistics. Individuals do not count. What counts is the results achieved by the inoculation of thousands of men. What counts is the reduction to nothing of typhoid cases in the army hospitals. What counts is the reduction to nothing of the army funerals due to typhoid. typhoid.



From the Chicago Herald. Will it be necessary to call another nternational convention for the discuson of safety at sea?

Fog, the most terrible enemy at sea, as been teaching navigators some olemn lessons latterly. The moral of the disaster in the St. Lawrence has been emphasized by the collision be-tween the Wilhelm II and the Ince-more in the English Channel. Five or six other accidents, some of them ious have occurred in the last days, and they have all been attributed

to dense fog, coupled with overconfi-dence, perhaps. The London convention on see safety has not yet been ratified by our Senate. Some of the objections thereto have been removed by a resolution reserving the right to impose the right to impose the right to impose higher stands on vessels in American waters. Other objections are still under discussion. The fog question, apparently, has not received sufficient attention. Too much is left to the discretion of cap-tains and other officient tains and other officers, and some take chances where prudence should suggest the stopping of the engines. We have had accidents enough to make the question urgent.

house of the mercury runs up with each pulse beat and down between the beats. If an index pressure record-er was used you noticed that the needle played back and forth in the same way. What is called the blood pressure is the highest point reached by the needle or the mercury as the wrist pulse stops.

To speak more accurately, the exam-iner pumps up the tube until there is The points up the tube until there is sleeping, of exercise, time of day, pos-no longer any pulse at the wrist. He then permits air to escape until the first faint trace of a pulse can be felt. This is called systolic pressure. He then allows more air to escape, and presently the faint thready wrist pulse is replaced by a full pulse. The point of the next lesson-name-by the relation between systolic, diasis replaced by a full pulse. The point at which the full pulse appears is read off as the diastolic pressure. The difoff as the diastolic pressure. The dif-ference between these readings is the

pulse pressure. The diastolic pressure is the measure of tension of the blood in the artery bebit tension of the blood in the artery be-tween heart beats. When the heart beats and throws an extra quantity of blood into the artery the pressure jumps up and produces systolic blood pressure. Then the diastolic pressure is the tension of the blood in the artery: the pulse pressure of the blood in the artery; the pulse pressure is the mea-sure of the force of the heart beat, and these two added together make the systolic blood pressure. This last is what we mean when we speak simply

is what we mean when we speak simply of the blood pressure. The pulse pressure is the measure of the force of the heart beat. The dia-stolic pressure is the measure of the blood pressure inside the vessels be-tween beats. What is ordinarily called blood pressure better called systolic blood pressure, better called systolic blood pressure, is a measure of the pressure due to the heart force plus the vessel force. Or, to put it again and in another way, the pulse pres-sure shows the condition of the heart muscle; the diastolic pressure the con-dition of the vessel walls; the systolic pressure the maximum pressure te which the vessel walls are subjected.

determine what the pressure To ought to be, Faught recommends the following formula: A normal man at 20 has a pressure of 120; a woman at 20 has a pressure of 120; a woman at the same age has 110. To get the nor-mal pressure for a given age add 1 for each two years over 20. Accord-ing to this rule, a man of 50 should have a pressure of 135 and a woman of that age one of 125. The Faught scale allows for a varia-tion of 26 between hick and her ner-

tion of 36 between high and low nor-mal, as he terms it. A man for whom 135 is normal may have as low as 118 without being disturbed, or it may go as high as 142. These would be his low and high normals.

If the blood pressure goes more than 15 over the high normal or the same below the low normal the case should be carefully inquired into.

be carefully inquired into. The blood pressure, the pressure that the blood is under in the vessels, is de-pendent upon two groups of forces. The blood is caught between these forces like a file in a vise. Pushing from behind is the force of the heart and the force of the arterial elasticity. Pushing from the front is the resist-ance of the vessel walls everywhere. Therefore what we do when we measure blood pressure is in a way measuring the resistance throughout

alysis and a better understanding of the relation of different conditions to blood pressure. The bald fact that one's blood pressure is 160 is not enough on which to base an opinion.

The relation of age to blood pressure somewhat understood, yet some peois somewhat understood, yet some peo-ple need to know about that. The re-lationship of eating, drinking, and sleeping, of exercise, time of day, pos-ture, excitement, all this needs to be ly; the relation between systolic, dias-tolic, and pulse pressure.

Finally, it is time to begin general discussion of the relation of different diseases to blood pressure and of the possibility of raising or lowering blood pressure by changing one's mode of life.

In 1913 Bermuda shipped more than 0 pounds of onion seed to the United States.

TO HEAD DISASTER PROBE COMMISSION



The news that Lord Mersey, who presided over the British inquiry in-to the loss of the Titanic, is to be a