

THE MAKING OF A FAMOUS MEDICINE

How Lydia E. Pinkham's Vegetable Compound is Prepared For Woman's Use.

A visit to the laboratory where this successful remedy is made impresses even the casual looker-on with the reliability, accuracy, skill and cleanliness which attend the making of this great medicine for woman's ills.



Backache?—you need immediate help. Ask druggist for Dodd's. Inset on box shown, standard for 40 years.

Cuticura Heals Itching Burning Skin Troubles

W. N. U., FT. WAYNE, NO. 50-1918. BOON TO ISOLATED PEOPLE

Thanks to the kindly impulses of Col. George Moran, manager of the United States and Australian Steamship company and of the steamship Australian of that line, Bony Bay, Pitcairn Island, received its first regular mail delivery from the United States, says Christian Science Monitor.

It is better to live in the foggy present than in the misty past.

Advertisement for Grape-Nuts cereal, featuring the text 'Solid Winter Nourishment' and 'The real food elements of wheat and barley so made as to be rich in sugar, and ready to eat from package with milk or cream. That is Grape-Nuts A Substantial Food and Economical'.

A PERFECT WIRELESS TELEPHONE IS AMERICA'S GREATEST WAR SECRET

For Months American Airplanes Here and in Europe Have Been Equipped With Apparatus by Which Their Movements Were Directed by Voice Command—Hardest Tests Fail to Impair Its Complete Efficiency.

WILLIAM A. WILLIS In the New York Herald.

America's biggest war secret, the development and perfection of the wireless telephone, is no longer a secret. Eight years of work by wizards of science in the United States army, aided by civilian workers in radio problems, came to successful consummation last February.

The secret has been well kept for many months. Outside of members of the air service few have known it. Those few have maintained absolute silence. The war department has regarded the solution of the problem of what now is called "voice command flying" as one of the greatest and most important achievements of the age.

German aviators knew that the American flying men had some advanced method of communication but did not know exactly what it was. The French and British flying forces have dabbled with the wireless telephone in connection with airplanes for some time, the British meeting with some success. It remained, however, for men of the American air service to perfect the radiophone. This they have done.

The writer is the first civilian outside of Newton D. Baker, secretary of war; Mr. John D. Ryan, director of aircraft production, and one or two other highly placed government officials to observe this latest of great American inventions tried out. It was on receipt of word from Minola that the hardest tests the new wireless telephone had ever been put to had failed to impair its complete efficiency.

These tests were made at Hazelhurst and Roosevelt fields, near Minola, under the personal direction of Maj. Gen. William L. Kenly, chief of the division of military aeronautics, who came over from Washington for the specific purpose of finding out if there was any feat in aviation that could break down the "voice command" system of communication. When he quit after an afternoon of hair-raising stunts with every kind of aircraft from the slow training planes to the swift eagles of the air the De Havillands, he expressed himself as completely satisfied that the wireless telephone as part of airplane equipment has come to stay and is in shape to meet almost any situation short of an actual smashing.

No Need for Further Secrecy. The ending of the war has made further secrecy in connection with this amazing invention unnecessary, in the opinion of Mr. Ryan and General Kenly. There are certain secrets in connection with the apparatus used that naturally will not be revealed. But the principles involved were made clear without reserve by Col. Clarence C. Culver of the aviation corps, the man who has led the work of perfecting the wireless telephone and who is credited by scientists with the major part of the credit for its success.

Those who have seen airplanes in battle formation many thousands of feet in the air have perhaps wondered how at a given moment they have all turned or looped or dived as one machine, maintaining the precision almost of West Point cadets on dress parade. The answer is that each man has a telephone receiver fastened to his helmet through which he has received the order of the squadron commander as clearly and audibly as if he were an infantryman on the ground being addressed by his company captain.

tain. The roar of the motor and the whirr of the propellers have no effect whatever on his power of clear transmission or on the ability of his men to receive his words.

The tremendous value of the invention which Colonel Culver and those associated with him have brought to perfection, is not easily understood by civilians. But through its operations it is now possible to send students into the air alone and direct their daily drill from the ground, thus eliminating the necessity of endangering experienced pilots, who, as instructors, have hitherto been obliged to go up in the air with their pupils.

It also is now possible to train aviators in advanced flying, the instructor on the ground being able to see the work of his student and instantly correct his faults. In training and directing pilot gunners and bombing pilots the wireless telephone also is of inestimable value.

The tests of the new invention were conducted in the presence of General Kenly, Colonel Culver, Col. Millard F. Harmon, Jr., commander of the first provisional wing; Maj. Ralph Conis, commander of Roosevelt field; George C. Norton, a lawyer, and the writer. Lieut. Hudson R. Seering took the air in a De Havilland at Hazelhurst field, at an order from General Kenly.

Looks Like Ordinary Transmitter. Colonel Culver took what looked to be an ordinary telephone transmitter in his hand. This transmitter was connected by a wire with a small wireless plant built on the field. Lieutenant Seering had a receiver in his helmet but no transmitter, so he had been instructed to indicate "yes" by a slight forward tip of his machine, and "no" by waving his plane from side to side, much the same as a boat rocking in the water.

When Seering was 2,500 feet in the air and perhaps half a mile from where the party was standing Colonel Culver, speaking into the transmitter in a tone only slightly above normal, said:

"Can you hear me, Seering?" Instantly the machine took a forward dip.

"Do you hear me clearly?" asked Colonel Culver.

The machine took another forward dip.

"Are you cold?" was the next question. The machine instantly began rocking from side to side.

"Well, climb a bit higher," ordered Colonel Culver.

Without a second of delay Lieutenant Seering started up.

"That's high enough," said Colonel Culver.

The machine flashed out.

Then followed a bewildering series of "stunts," each in response to a word order from the ground, the flyer doing nothing on his own initiative. During Lieutenant Seering's flight, he ranged from 2,500 feet to 3,500 feet altitude. At no time was he more than three miles from where General Kenly and Colonel Culver stood.

Neither his altitude nor his distance from the transmitter, however, affected his ability to hear whatever was said to him.

From Hazelhurst field General Kenly took his party to Roosevelt field, where the performance given was so remarkable that it threw into the shade the test made with Lieutenant Seering, astonishing as that seemed at the time. Nineteen battle planes, equipped with Liberty motors, took the air at once. They were commanded by Maj. Joseph E. Russell, acting as squadron commander. Eighteen of the pilots were equipped with receiving apparatus. Major Russell alone had a transmitter equipment.

This air fleet shot off into the south at a speed of 130 miles an hour, but soon returned in a V formation. Major Russell flying higher and well behind his squadron. Passing over Roosevelt

field the squadron went through several maneuvers, forming right lines and left lines, breaking off in different directions and swinging back into line again. Everything was done with perfect precision.

Colonel Culver explained that Major Russell was giving every order by word of mouth and that every man in the fleet was getting orders at the exact instant.

"Now if you want to you can stand here on the ground and hear Major Russell give these orders, and you can at the same time that you hear them see them carried out," said Colonel Culver.

He led us to a small shack from the roof of which dwarf aerials projected, but receivers over our heads, and a moment later I heard a strong voice say:

"By the right flank." Then there was a second of hesitation, followed by a stentorian, long drawn-out "Go," and away off in the eastern heavens I saw the long line of small dots swing off to the right, and for the moment, out of sight. And those words came from Major Russell, spoken in an ordinary tone, 4,000 feet in the air and fully five miles from where I was standing. And I was informed that it would have been just the same if he had been further away. However, the range of the new wireless telephone is one of the secrets that the division of military aeronautics is not revealing just now.

For more than an hour I heard Major Russell put his squadron through a drill and at the same time that I heard his orders I saw them executed. Those things took place while these 19 airplanes were rushing along at more than a hundred miles an hour at an altitude ranging from 4,000 to 6,000 feet, and with the man giving the order fully two miles from the nearest of his men.

The apparatus used for wireless telephoning is so simple and so compact that one would never notice either the transmitting or receiving devices on an airplane unless his attention was called to it. With the consent of General Kenly, Colonel Culver gave me a great deal of information about these devices and the following facts are the first published about what perhaps is the greatest invention of the war.

Description of Device. The transmitting set consists of a power plant, a set box, a transmitter or microphone and an antenna system. The power plant consists of a generator driven on the windmill principle by the passage of the airplane through the air. It is placed some where in the open, usually on the running gear or on one of the wings, and its tiny propeller blade whirrs vigorously as the airplane travels along.

The so-called set box receives the power from the generator, converts it and places it on the aerials in the form of sustained or undamped waves. The voice entering the transmitter varies the electric current on the wires, which are connected as in the ordinary telephone. In the set box the variations received from the transmitter, are converted and act to effect a modulation of the continuous or undamped waves already referred to.

The antenna system consists of an aerial of one or two trailing wires of approximately 150 feet in length, strung out from the wing tips. This is counterpoised by the wires and other metallic parts of the airplanes all bonded together. These two elements of the antenna system are analogous to large overhead wires and to the "ground" of a land wireless station.

The receiving set consists of a receiving set box, a head receiver, a source of power and an antenna system. The latter is the same as the antenna system in the transmitting set. The source of power is a small storage battery. The head receiver is built into the aviator's helmet in such a manner as to exclude sounds from the motor reaching the pilot's ear and interfering with his hearing. The set box proper contains apparatus quite similar to the receiving apparatus of a first-class wireless station. However, it possesses a number of refinements over these which increase the audibility of incoming signals, with stand vibration and minimize weight.

TALES FROM BIG CITIES TOO WEAK TO FIGHT

Girl Gob Goes to Have Her P-p-pic-cher Taken

CHICAGO.—"A girl gob! Well, I'll be—!" quoth Patrolman Harold Foss. He cocked his head on one side and then he cocked it on the other to see if he saw aright. Vision good, mentally noted Patrolman Foss. Anybody here ever see a copper run down a girl gob? Big flat feet went clump, clump, clump. Laffy bitty feet went tumpety, tumpety, tump. Big copper wheeled like an ancient fiv. Gobbers' hair came down and waved in the air. She scuttled and squawked like a frightened bird.



Then the hand of the law descended. Miss Lydia Greiger, 2620 Spaulding avenue, wept at the station and pleaded:

"I'll t-t-take these o-o-off if you'll lemme e-g-go h-h-home," she sobbed.

And then, as she wiped away tears and her chin trembled some more, she added:

"I only w-w-went d-d-down the street t-t-two blocks to get my p-p-pic-cher taken in 'em."

Well, a policeman started out with the girl gob and the trail led to the home of Louis Berger, 636 Blackhawk street. Louis, bluejacket, was also in a fix. Louis had lent 'em to her for the picture and gobs can't go out without 'em.

"He said he'd been at sea for 17 months and had come home to marry her," explained the policeman to the lieutenant. And then the policeman sighed and cell door opened for the gobbers.

"Not Yet, Old Scout, but Soon—and Darn Soon!"

PHILADELPHIA.—Time: The day of the fake news of Germany's surrender. Scene: The great banking office of Drexel & Co. In the midst of subdued and decorous rejoicing the office boy was heard to exclaim: "Gee! Here comes old Duval." Entered a little old man, limping and with one arm twisted from the thrust of a German bayonet at Sedan 48 years ago. Now, impoverished, he sharpens knives and razors for the office force.

"Observe, m'sieur; but half a franc and she is as good as new," he began, but his patron interrupted him to tell the good news.

Contrary to expectations, old Duval did not toss his hat skyward, neither did he shout for joy. He stood as if drooping on his knees upon the marble floor. With trembling hands outstretched to heaven, the tears streaming from his upraised eyes, in a voice quivering with emotion, old Duval began to sing aloud in his native tongue the strains of the Marseillaise. His voice, quivering at first, gained in strength; all conversation stopped; the typewriters ceased their buzz, chatter; men removed their hats, and clients writing at desks rose quickly to their feet.

But many a column of figures seemed strangely blurred as heads were again bent over ledgers, and more than one eyeglass required a brisk polishing. It is not pleasant to speculate upon old Duval's feelings when he later realized that the glorious tidings were only a hoax, but the kind-hearted office boy proved to be a true prophet when he comforted the old soldier next morning with these words:

"Not yet, old scout, but soon—and darn soon!"

Mother's Grief Softens Runaway Girl's Heart

ST. JOSEPH, MICH.—In these days of opportunity it is evident that the quiet home life has lost its charm for many young women. If they cannot go forth into the world with their parents' blessing—why, they go just the same. The police of all cities are besieged by distracted parents looking for daughters who have disappeared from sight as if the earth had swallowed them.



Mrs. Paulina Koswick, St. Joseph, Mich., appealed to the Chicago police to find her daughter Marjory, seven years old. The only light on her disappearance was the following letter she left for her mother:

"Dearest Little Mother: You are going to be terribly surprised when you get this; maybe you will feel terrible, but try and look at it the best way, which is the only way.

"I've gone to Chicago to be a companion to an old lady we met this summer and who does charity work. I am going with her for company and to amuse her when we are at home.

"It is all fixed up, and she met me today and we are going to New York, where she lives. I'll be perfectly all right, and will write you often and tell you how I am getting along. Don't worry, because it will be just like being with you. I'll send you some money the very first I get.

"I will send you money every month. With love, MARJORY." The distracted mother appealed to the Chicago police. The Chicago newspapers told her grief and anxiety. Marjory read the newspapers. She communicated with her mother, who found her in the Y. W. C. A. hotel.

Woman Raises Patriotic Spuds in Her War Garden

DENVER.—Many thousands of patriotic women the country over had successful city-fort gardens last summer. And doubtless many of them raised a crop of first-class potatoes. But Denver boasts a woman gardener who has apparently established a record for patriotic success in the line of spuds.

This amateur gardener is Mrs. Grace Sears of 15 Federal boulevard, Barnum. And she certainly has a right to feel proud over her achievement.

For she has grown potatoes in the three colors of the American flag—red, white and blue. This is not a figure of speech, either, written for the purpose of stirring some other gardener to emulate or attempt to surpass the accomplishment. It is an actual growing of potatoes in the three colors. Mrs. Sears has exhibited the potatoes to a number of friends, who have expressed the proper amount of surprise and gratification at the result of her summer's work.

The red is the Early Rose, familiar to every grower of spuds within the last half century.

The white is what is known as the Burbank potato, and is a clean-skinned, very light variety that fully bears out the designation of white.

But for the blue potato Mrs. Sears does not have any name. She says that it was called "just blue" to her when she got the tubers which she planted, and that is all the name she knows for it. But it is a decided blue in color.

Lack of Neighbor's Appreciation Peeves Bride

NEW YORK.—"I've made up my mind," sighed the bride with the bobbed hair, "that it's the utter lack of appreciation on the part of some people that makes life so hard for the rest of us. And, for an example of ingratitude, take Mrs. Smith in the apartment across the hall.



"I've made every effort in the world to be nice to her simply because she happens to live in the same building. She is a widow and her two sons are overseas. I considered it my duty to show her any little attention I possibly could.

"I used often to run over to her apartment when my telephone was out of order and use hers. When I noticed her electric runabout waiting, I would meet her, quite by accident, in the hall. Well, yesterday I heard that she was going to visit in the West for a couple of months and intended to close her apartment, so I hurried over and told her that I should be perfectly willing to have her send her victrola over to my apartment, so she need not worry about its being stolen while she was away. She thanked me and said she had already sent it to Miss Jones, who lives in the apartment above, because Miss Jones had been such a kind neighbor.

"Why, I didn't know that you knew Miss Jones, except to bow," I gasped. "She never runs in to see you in a neighborly way, at all, does she?" "And the ungrateful Mrs. Smith, after all the courtesies I had shown her, calmly remarked: 'No, bless her heart, she never does.' " "What do you think of that?"

Queens and Tobacco

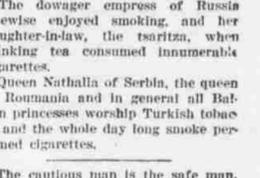
There are queens hostile to the use of tobacco, such as Queen Mary of England; there are others, and more numerous, who do not disdain to smoke in their intimacy a good number of cigarettes.

Queen Amelia of Portugal, for instance, was wedded to tobacco. She undoubtedly had this passion for tobacco from her mother, the countess of Paris, who even smoked cigars, and one day took to the pipe.

The dowager empress of Russia likewise enjoyed smoking, and her daughter-in-law, the tsarina, when drinking tea consumed innumerable cigarettes.

Queen Nathalia of Serbia, the queen of Roumania and in general all Balkan princesses worship Turkish tobacco and the whole day long smoke perfumed cigarettes.

The cautious man is the safe man.



Your Labor Counts—every ounce of work you do helps some soldier.

This war was fought as truly in the household and in the work-shop as it was in the trenches.

Some of our American women are borne down physically and mentally, by the weakness of their sex. They suffer from backache, dragging sensation, bearing-down pains, very nervous and pain in top of head. If they ask their neighbors they will be told to take a Favorite Prescription of Dr. Pierce's, which has been so well and favorably known for the past half century.

Weak women should try it now. Don't wait! Today is the day to begin. This temperance tonic and nerve will bring vim, vigor and vitality. Send Dr. Pierce, Buffalo, N. Y., 10c for trial pkg. tablets.

Lafayette, Ind.—"I was in such a terribly nervous condition that I could not sleep at night. I would have dreadful nightmares. My druggist recommended Dr. Pierce's Favorite Prescription to me and it has helped me wonderfully. The first half bottle cured me of my nervousness and made me able to sleep at night just as a child. It has also relieved me of pain which used to bother me a great deal at times. Dr. Pierce's Favorite Prescription is a grand tonic for women and I do not hesitate to recommend it."

—Mrs. Chas. Coleman, 631 Ferry St.

Acid-Stomach Ruins Health of Millions

Besides those painful attacks of indigestion, that awful bloated, lumpy feeling after eating, and downright stomach misery that you who have experienced it know so well; besides disgusting belching, food-repeating, sour stomach and distressing heartburn—besides all this, ACID-STOMACH undermines the health and saps the strength of millions.

If you don't get rid of those stomach "miseries" there is no telling where your stomach troubles will end, for it is a well known scientific fact that many serious ailments have their start in an acid-stomach.

Start now—this very day to get rid of your stomach miseries—take EATONIC—the wonderful remedy that absorbs the excess acid from the stomach and brings INSTANT relief. You simply have no idea how much better, stronger and brighter you feel at once. It drives out all the gas and puts an immediate stop to belching and heartburn, ends stomach suffering and makes it cool, sweet, comfortable and strong.

There can be no further excuse for you to allow acid-stomach to wreck your health—pile up misery upon misery until you get to the point where you feel down and out and that life has lost all its joys. Remember, just as acid-month ruins teeth, so acid-stomach ruins health.

Take EATONIC. It's good, just like a bit of candy and makes the stomach feel fine. You can then eat the things you like and, what is more, every mouthful you eat will count in creating power and energy. You'll feel no much better—have punch and pep—the power and will to do things and get results and your stomach misery will be gone.

Take our advice. Get a big box of EATONIC from your druggist today; it costs so little. If it fails to remove your stomach distress, he will refund your money. That is guaranteed, you are to be satisfied or money refunded.

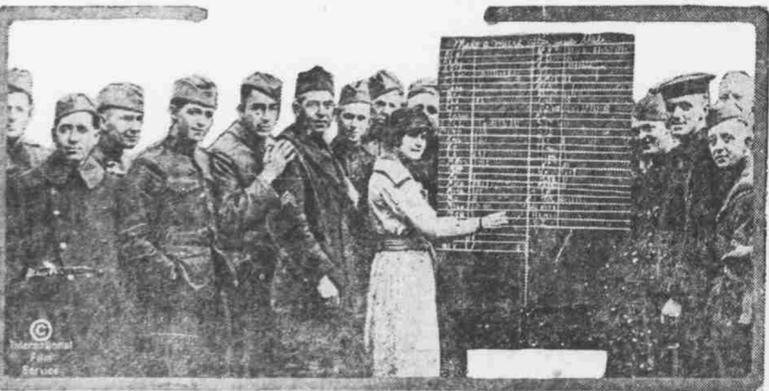
EATONIC (FOR YOUR STOMACH'S SAKE) Magic Relief for Bad Stomachs

Irritating Coughs

Promptly treat coughs, colds, hoarseness, bronchitis and similar inflamed and irritated conditions of the throat with a tested remedy

PISCO

FROM EAST AND WEST AND NORTH AND SOUTH



During an entertainment at the Y. M. C. A. Eagle hut in London recently a blackboard was erected and each soldier and sailor present was requested to mark down the name of his home state. Within 15 minutes every state in the Union was represented.

WILL STOP THE USE OF DOPE

Campaign Against Habit-Forming Drugs is Started in Cleveland.

Cleveland.—In an effort to stamp out the use of habit-forming drugs here an ordinance is being prepared for presentation to the city council, asking that doctors be forbidden to furnish such drugs to habitual users but be required to refer the patients to the city drug

were placed under arrest as suspicious persons. Action is contemplated which will send them to the workhouse for 90 days, by which time it is hoped the drug will have been cleaned from their systems.

Substitute for Metal Pipes. Piping of compressed cellulose is now being used abroad instead of metal pipes, according to reports. While satisfactory for hot and cold air and corrosive acids, it is not suitable for steam