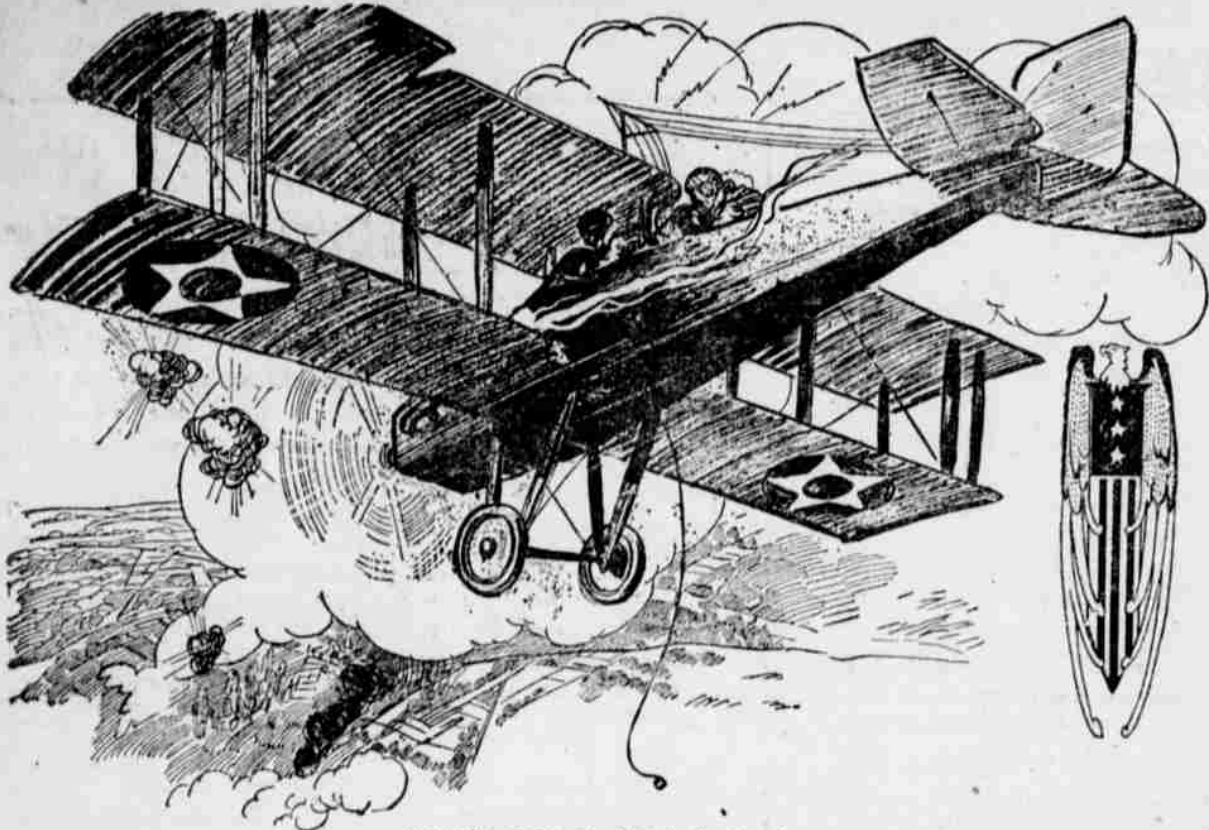


# Voices from the Clouds



## Unknown Ten Years Ago, Wireless Telephone Is Now Widely Used on the Battle Fronts

How would you like to take up the telephone in the seclusion of your library and talk to your son on the battlefields of France something on this order?

Scene: An American home somewhere in the United States.

Fatherly reading the latest war news from the front. Mother, dad and sister Sue thinking about the big part Brother Bill is playing in the great game over there.

"B-b-b-b-bing!" The telephone rings! Dad takes up the phone. Central asks if you are there and then hooks up the connection. After an instant comes a familiar voice:

"Hello, hello! Is that you, Dad? This is Bill."

"Well, well, boy, where are you?" "Just got in from ramming another hole through the Hindenburg line. Got the Hun on the run. Feeling great. Good luck; good-by!"

If Kaiser Bill had delayed pulling down the roof on the house of the world a few years longer it is quite likely such scenes would have been possible, says a writer in the Philadelphia Public Ledger. Fathers and mothers would have been able to talk to their sons in the faraway military camps here at home. They could have conversed with them thousands of miles out at sea while the great gray ships were conveying the boys over the blue. They could have heard the voice of the boy from the battle-scarred fields of France and Flanders.

Radio-telephony at the beginning of the practical stage where it was to take its place with radio-telegraphy as one of the marvels of the age. One year after Mars unloosed his guns the human voice was projected across the Atlantic ocean—from Arlington, Va., to the Eiffel tower in Paris. Intelligible speech was transmitted also from New York city to Pearl Harbor in faraway Hawaii, close to 5,000 miles, or further than from New York to Paris, Rome or Vienna, or from New York to the North Pole.

Scientifically demonstrated as a feasible proposition, the wireless telephone was about to be commercialized when the war intervened. Fathers and mothers of America could talk to their sons in France today as outlined above were the facilities available. But man has had to devote all his endeavors to the overthrow of militarism, and as a consequence the peaceful developments of the scientific world have been held in abeyance until the time when the beast of carnage shall have been caged and the human family take up again the wonders of the new era.

**War Hastens Development.** The war, if anything, however, has but hastened the universal utilization of radio-telephony. While the world is engrossed in the titanic struggle from Belgium to Switzerland, it has not had time to note all the remarkable progress that has been accomplished in the conversion of the "theoretical" to the "practical"—the dream turned reality.

Aviation was a hazardous game in America before the war—scuffed at

as the sport of daredevil fanatics. Yet at this moment the winged members of our air cavalry take to the clouds with the same nonchalance that the average motorist tunes up for a trip to the seashore or mountains. Robbed of its battle dangers, aviation today stands out as an accomplished fact, to be negotiated with ease, comfort and safety. Our boys after the war will turn their garages into hangars. The aerial postman breaking records today between New York and Washington is a harbinger of the new era of air transportation.

So after the war the wireless telephone will be developed as a casual commercial asset and men will talk with their business partners in London, Paris and Rome, say the scientists, just as today they use the telephone to communicate with Atlanta or Chicago.

In the army and navy of the United States this fall, radio-telephony is playing a potent part in the business of winning the war. Thousands of young men who go up to the radio arms of the service are linking together the fighting forces of the nation so that each and every separate unit is closely united under a single guidance, working cohesively for the one supreme attainment and at a moment's notice in the most intimate contact with their military directors.

The great problem in radio-telephony at first was the question of sufficient energy control. It was necessary to develop transmitting stations capable of generating high-frequency currents and radiating them so that the currents induced in the receiving apparatus when rectified would cause no disturbing noise in the telephone receiver. It was necessary also to find the means by which the amplitude of the high frequency currents could be controlled and modulated by the voice so that the amplitude of radiated waves followed closely every variation in the voice.

**Brought Under Control.** All of these difficulties have been overcome in the last few years by the world's renowned scientists. A system of control has been built up with the pliotron as its potential pivot so that the amount of energy in the wireless telephone transmitter need be no larger than that commonly used in standard telephone circuits. It has been found possible to connect up this radio telephone with the regular telephone lines so that conversation may be carried out between two people, both of whom are connected with the radio stations by means of the regular land lines.

Two fields of activity for radio-telephony opened up with the development of the first wireless telephone. The first was for long distance where wire telephony was impossible over submarine cables and expensive on land. The other was for short distances between ships at sea, and between land stations.

**Atmospheric Conditions.** Transoceanic communication is likely to be developed faster than inland radio-telephony. It was pointed out some time ago by J. J. Carty, the electrical engineer whose achievement made possible the first wireless telephone messages from New York to Pearl Harbor, Hawaii, that transmission across the ocean was easier than across land because there were fewer atmospheric disturbances.

"Overcoming these disturbances is the greatest problem we have at hand," he said. "We do not know exactly what causes them, but from our first experiments we know that they are greater in summer than in winter, so are probably caused by electrical disturbances in the atmosphere. Theoretically any number of messages can be kept separate by tuning the appa-

rats and other devices. Practically when it comes to the rapid vibrations necessary to carry the human voice, the number is very limited. There is no way of preventing anyone within the zone of communication from taking any message his instrument is tuned to. And if there were many messages at once they would interfere with each other."

It would appear now that these difficulties were being overcome for, according to reports from the battlefields of France, the wireless telephone is proving a mighty valuable asset in the maneuvers of modern warfare, despite all the gunfire and the disturbed atmospheric conditions. Going over the top in trench warfare, the old reliable telephone was a handy asset in communicating to the rear the results of the advance. But lately the troops have been going forward so fast that as soon as one telephone line would be set up another extension would be necessary to keep pace with the flying Yankees.

**"Hello" From the Clouds.** It is in the air service that the wireless telephone now is being employed to such remarkable advantage. Voices out of the air, messages filtering down through the clouds, report the observations made during a reconnaissance flight and convey to headquarters the valued information as to the movements of the enemy troops.

It is said the airplanes now in flight uncoil a long strand of wire which acts as the antennae for transmission of the message. An observer in a village plane, noting the desertion of a village by the retreating Huns, has but to take up the telephone and "hello" his chief with the important message. Instantly the Yankees are away in pursuit.

The incandescent lamp plays an important part in the great game of wireless telephony from air fleet to land battlements. A tiny lamp that can generate one horsepower of energy is used to receive the faint currents, and a larger one boosts the currents so that the ordinary telephone apparatus can receive them.

According to report, it is a common occurrence for a young American or French aviator now to be talking to base headquarters while flying high in the heavens 80 to 100 miles away. With the receiving apparatus on the earth attuned to take the contact of wave lengths from his sending apparatus aloft he is able to report instantly on the developments below.

The wireless telephone has been little more than ten years on the way in the matter of actual demonstration of theories long held tenable. It began with simple experiments in the New York laboratories of Professor Lee De Forest, who succeeded in transmitting a distance of a few feet across a table without wires.

**Message of Peace.** It was first employed at sea on shipboard in July, 1907, in reporting yacht races from the yacht Thelma in Putney Bay, a distance of four miles. Next experiments were made on the battleship Connecticut off Cape Cod. Without wires messages were relayed to the battleships Kentucky and Illinois, a distance of eight miles.

From this beginning radio-telephony was developed until transoceanic communication became possible. All that has been done in a military way cannot be revealed until the war is over, but it is certain then to unveil some startling disclosures. It seems certain, for one thing, that the message of peace, proclaiming the overthrow of German militarism and the triumph of democracy, will be relayed completely around the world by the wireless telephone—a voice out of the clear sky proclaiming the dawn of the great day.

Manless Bombing Plane Invented. Jacob Weisbaum of Cincinnati, Ohio, has invented what he calls the "Weisbaum manless bombing plane." He claims the machine, without the aid of human hands after it leaves the ground, can be propelled through the air at terrific speed toward an objective upon which it will automatically release death-dealing bombs.

Japanese claim to have invented matches that will light perfectly even when wet.

He Takes the Blue One. Of course you've heard about the hardworked guy whose job was to pick the blossoms off the family century plant; the bloke who sticks the spots on double-blank dominoes and the culprit whose life work is making bird seed for cuckoo clocks, but the champagne, double-bowknotted, floatin' axled and vulcanized war loafer is the cuss who said he was doing war work by picking up the stitches his wife dropped when she knitted.—Indianapolis Star.

# CALLOUS AMID HORRORS OF WAR

Gross Sights of Battle Fail to Shake Nerves of Yanks.

## QUICKLY ADAPT THEMSELVES

Admiration of French and British Veterans Is Aroused by Conduct of Americans on Bloody Battlefields of France.

With the American Army.—The calmness and steady nerves of fresh American troops in recent advances have gladdened the hearts of veteran British and French who have observed them, as well as filled with pride their own officers.

The horror of warfare is more apparent during an offensive when an army is advancing than at any other time; even during a defensive action in a retreat. Attacking troops advance over the enemy's positions, dotted with dead and dying, then dig in and fight among the corpses and maimed. Often in a counter-attack they are temporarily thrust back a few yards, and there dig in and fight again, this time among the bodies of their own fallen comrades.

When their advance becomes deeper and the enemy's retreat more general, as in Von Boshoff's retreat from the Marne to the Vesle, the terrain becomes even more ghastly. A wide belt of country is littered with dead men and dead horses. The advancing army, eager to maintain contact with the enemy at all times, has no time to bury or burn these corpses, respectively. The supporting troops following up the advance guards must live and eat among these gruesome sights.

**Never Feared Them.** Fresh, untried Americans, who had not seen the frightfulness of war, although they had been trained in its artifice and had been in the line in quiet sectors, traversed the ghastly country like veterans, never turning a hair at the sight of dead, friends or foes, even when they came upon such sights as Ruddy farm, Bellemeuse farm, Clerges, Seringes et Nesles and Serj.

In these places, particularly the first two mentioned, the bodies of the Prussian Guardsmen were literally lying in heaps, for these picked troops

had been told to maintain their strong point positions until death, and in most cases they followed orders.

The dead were in the distorted positions that indicated how the end had come to them. Those killed in machine-gun pits were smashed to bits, the effect of hand grenades and bombs which American advance guards had tossed in among them after working round their flanks and getting in behind them.

Occasionally one saw German snipers or machine gunners sprawled flat on the ground at the foot of a tree after they had been shot out of their camouflaged positions among its foliage. The most sickening sights were where bodies of the enemy had attempted to make stands in ditches or beside sunken roads and had been trapped by American enfilade machine-gun fire. The deadly automatic rifles had ripped through whole lines of Germans, and investigation frequently showed that every man's body was pierced by seven or eight bullets and that frequently the same bullet passed

# SIGNAL MEN HUSTLE

They Have to Work Rapidly as Fight Rages.

Wire Connection Is Prime Necessity No Matter How Fast Shells May Fly.

With the American Army in France.—The signal corps men had to do some fast work during the recent fighting to keep up with the infantry and to keep communications always open between headquarters and the villages newly captured where the doughboys were.

The signal corps was the connecting link between the infantry, artillery, ambulance service and headquarters. It is no cinch being the signal corps in a division that is continually gaining ground.

As soon as the infantry makes a push you have to get a telephone line strung into the farthest ruins or woods or wheat field, no matter how many German shells are spattering madly over the area.

Then, about the time you get a wire

through three or four men. These corpses looked like heaps of rags or discarded uniforms and equipment, so closely did they overlap one another.

**No Trace of Nervousness.** But, despite all, the Americans marched forward, stopped three or four times a day for meals, and then made camp, and slept at night amid the horrible surroundings without ever doing more than showing a surprising preliminary interest in the matter. If they saw a corpse in khaki they looked it over closely to see if they knew who it was. Only occasionally did they have time to inter it; that was left to the burying parties that followed them up. As they walked through woods and fields to get water or supplies, they implanted rifles, bayonets down, in the ground to mark the spot of every dead American they discovered.

But there was no trace of nervousness and no evidence of any of the men worrying or brooding over the fate of their fallen comrades. The corpses were entirely impersonal to them and never rattled even the newest recruit.

The doughboys showed no backwardness about appropriating Luger automatic pistols, the most prized souvenir to be had, from dead Boches, nor did they hesitate to pluck off well-camouflaged helmets from the pates of Hun cadavers.

# WIPER OUT OF THE MACHINE-GUN NESTS

This is one of the small British tanks that do such valiant service in wiping out the machine-gun nests that the enemy relies on to make good its retreat.



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# FOE FEARS FRENCH TANKS

With the American Armies.—Greater laurels daily are being won by the French light tanks which are co-operating with the American forces in pushing the Germans back toward the Rhine.

Among the many individual feats of the tanks and their drivers which have come to light, one of the most interesting is that of Brigadier Cellier, who has been decorated with the cross of the Legion of Honor for his work in a light tank which enabled 15 American soldiers to capture 700 Germans.

Several hundred of these tanks led the counter-offensive from the Villers-Cotterets forest in July, which marked what appears to have been the turning point of the war. They broke through the enemy's lines, destroying his machine guns, overcoming strong centers of resistance and spreading panic and demoralization in the German ranks.

Where the infantry was preceded by the "chars d'assaut," as the French

call them, the advance was three miles a day.

It was these same French light tanks which preceded the Americans in their advance upon Juvigny and Tery on the Soissons plateau. One of them, manned by a lieutenant, killed more than 200 Germans on the plateau.

Documents that have come into the hands of the French staff show that the light tanks and are studiously coaching their men in methods of defense against them.

The light cars have the advantage of greater speed and of being more easily handled than the heavier tanks. They require a crew of only two men, a driver and a gunner, and carry one one-and-a-half-inch gun and a machine gun.

Trade unionists in Sedalia, Mo., have become interested in co-operation and are selling stock to start a store.

# HUN SELLS SUPPLIES SEIZED

French Forced by Germans to Pay in Coin for Rations They Once Owned.

With the American Troops in France.—Renewed evidence of German ruthlessness in dealing with the civilian population of invaded territories is contained in a captured army order. It prescribes the treatment and the procedure to be followed in a section south of the Vesle river (Marne salient).

All the inhabitants capable of working, the order says, must be used for the needs of the army, regardless of their age. Their "salaries" are to be paid in paper currency at the rate of 50 cents a day as the maximum for men; 40 cents for men and women between the ages of seventeen and twenty; and 30 cents for boys from fifteen to seventeen.

The inhabitants, however, must pay in French gold or silver for their rations. The supplies, of course, were taken from the population before being sold back to them.

# HARD DAYS FOR THE CROOKS

New Draft Law Makes It Easy to Hunt Down Criminals.

Cleveland.—It's getting harder every day for an honest crook to get by. Police here are not satisfied to hunt crooks in the regular way, but are going out of their line to look them up, according to the complaints of the underworld. It isn't enough to make them give up their easy life, earned at the expense of the city, to register and go to war, but now the local police are going to get a lot more of them by means of registration cards for the draft.

Many of the robbers and other criminals have escaped detection through a series of aliases, but with their registration under the eighteen to forty-five call they had to make known their right names, and police assert that it will be "easy picking" now to gather in a number of men who have been wanted for some time.

French stocks of absinthe are being converted into ingredients for explosives.

# HAND MIRROR SAVES LIFE

Used to Make Signals of Distress by Survivors of Torpedoed Steamer.

London.—A woman's hand mirror was the means of saving 50 lives from the torpedoed liner Galway Castle. Among the survivors on a raft was a woman who took from her handbag a small mirror and suggested one of the sailors use it for making heliographic signals.

The attempts was made and the signals brought up a destroyer at full speed which took off the survivors from the raft as well as a number of sailors clinging to wreckage.

# "JERRY" NEW NICKNAME FOR GERMAN SOLDIER

It's Jerry now, not Fritz. It has been noted recently in soldiers' letters that the pet name for the enemy among the Yankees in France is "Jerry."

At the beginning of the war the name was applied only to German aviators, but it is rapidly being adopted for all of the troops.

# SCARCITY OF HELP IN HOMES SENDING FAMILIES TO NEW YORK HOSTELRIES

Scarcity of Help in Homes Sending Families to New York Hostelries.

New York.—Although the fuel problem which developed in New York homes last year is to a great extent responsible for the unprecedented business of the apartment hotels this fall, there have been new developments which increase the influx of apartment hotel dwellers throughout the city. The greatest individual reason is the servant problem.

Persons who have had servant staffs for years without a change have been known to lose as many as three in a single week lately because of unprecedented demand for experienced help and the prices offered for it.

The apartment hotel habit is easily formed, and with the scarcity of fuel, scarcity of help, scarcity of suitable apartments and scarcity of vans to accomplish large movements the fact that there is hardly an apartment hotel vacancy left in New York is not especially remarkable.

# BUILD MOTOR MAIL SLEIGH

Vehicle Designed for Mail Delivery Work in Alaska Completed for Government.

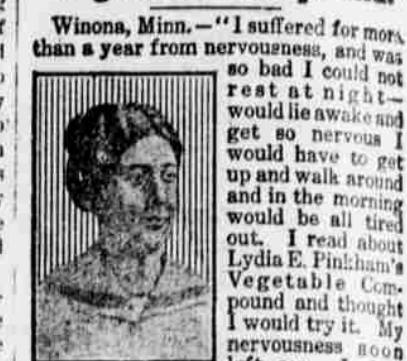
Cleveland, O.—The government's first motor sleigh, designed for mail delivery work in Alaska, has been completed here and shipped to the West coast, where it will get a test tour before entering the regular work of delivering mail in the frozen North. The machine was invented by F. G. Horner, former Cleveland, who for several years has been with the motor transport service in Washington. It is 25 feet long, three feet wide and is expected to cover at least 100 miles of ice or snow track a day with a burden of 500 pounds of mail. Present delivery in the field the sleigh will enter is made by dog teams.

# WHAT OUR HAIRS THINK

"Our lowest ambition should be a life of ninety years," says a noted physician. Well, it is sort of a low ambition just merely to hang on.—Boston Transcript.

# WOMAN'S NERVES MADE STRONG

By Lydia E. Pinkham's Vegetable Compound.



Winona, Minn.—"I suffered for more than a year from nervousness, and was so bad I could not rest at night—would lie awake and get so nervous I would have to get up and walk around and in the morning would be all tired out. I read about Lydia E. Pinkham's Vegetable Compound and thought I would try it. My nervousness soon left me. I sleep well and feel fine in the morning and able to do my work. I gladly recommend Lydia E. Pinkham's Vegetable Compound to make weak nerves strong."—Mrs. ALBERT SULTZ, 553 Olmstead St., Winona, Minn.

# A Cold Proposition

When you are wheezing and sneezing, coughing and hawking, you're facing a cold proposition. Handle it right. Hales Honey of Horehound and Tar quickly relieves bad cases. All drugists, 25c. a bottle.

# UP AGAINST IT

A corporal was drilling his squad, and before he noticed what they were doing they had marched right up to a fence and, according to rules, were marking time. The corporal, trying to remember the proper command, looked puzzled for a moment, then loudly gave the command, "Get away from that fence—march!"

# IMPORTANT TO MOTHERS

Examine carefully every bottle of CASTORIA, that famous old remedy for infants and children, and see that it bears the Signature of *Dr. J. C. Fletcher* In Use for Over 30 Years. Children Cry for Fletcher's Castoria.

# SAFE EXCURSIONS

There is a deathless joy in natural beauty. "Oh, that's one result of the justest Sundays."

# SUFFERED TERRIBLY!

"Every Step a Torture," Says Mrs. Whitenack—But Doan's Cured Her

Mrs. Florence Whitenack, 84 Armstrong Ave., Jersey City, N. J., says: "I suffered with rheumatism for six or seven years. My limbs and joints were so stiff and swollen, I could walk only with difficulty and the pains in my hips were so severe, I could hardly bear them. Every step I took was torturing. My feet and limbs were swollen and so sore, I could hardly bear to use them. My weight on them. During the night I would lie awake for hours and become so nervous, I would have to get up. Dizziness, Mrs. Whitenack came over me suddenly and my sight blurred. I was never free from the miserable backaches and rheumatic pains. I used different remedies, but I didn't get any better. Then I commenced to use Doan's Kidney Pills. The swellings began to leave right away and I continued to use them. The pains and aches left my back and hips and I am cured of the rheumatism and all signs of kidney trouble."

Sworn to before ROBERT KING SEIDEL, Notary Public.

Get Doan's at Any Store, 60c a Box

Doan's KIDNEY PILLS

FOSTER-MILBURN CO., BUFFALO, N. Y.

# WHY BALD SO YOUNG

Rub Dandruff and Itching with Cuticura Ointment

Shampoo with Cuticura Soap

One Hundred Per Cent American.

"What can I do to prove my devotion?" he asked.

"Buy more Liberty bonds," she replied for she was 100 per cent patriotic.

Grove's Tasteless Chill Tonic restores vitality and energy by purifying and enriching the blood. You can soon feel its strengthening, invigorating effect. Price 50c.

A man's idea of a perfect day is that which ends by sticking the other fellow for the dinner.

A torpid liver condition prevents proper food assimilation. Tonic up your liver with Wright's Indian Vegetable Pills. They act gently and surely. Adv.

The world soon forgets a man who wins his laurels and then quits.

The best thing going is an unwelcome guest.

# YOUR EYES

Granulated Eyelids, Eyes inflamed by exposure to Sun, Dust and Wind quickly relieved by Murine Eye Remedy. No Smarting. At just Eye Comfort. At your Druggists or by mail 50c per Bottle. or Book of the Eye free with a 30c Murine Eye Remedy Co., Chicago.

**Correct Standing Position.** Practice this standing position if you want to grow straight and tall. Place your heels nearly together, the toes pointed slightly outward, the legs rigid, the trunk and head well erect, and the shoulders somewhat back, so that the chest can expand at the sides, the arms should hang easily at the sides, the fingers slightly bent with the thumbs in front. You will feel self-conscious at first when standing correctly, because the more unnatural the position seems to you, the more incorrect your stand-

ing position has been in the past. Practice for a while at home until the position will become as natural to you as breathing. An incorrect standing or sitting position is responsible for a multitude of ills, both beauty and organic. This is due to the fact that the entire organic system is thrown out of place and so cannot perform its work properly.

Woman suffrage was approved at the convention of the Minnesota State Bar association.