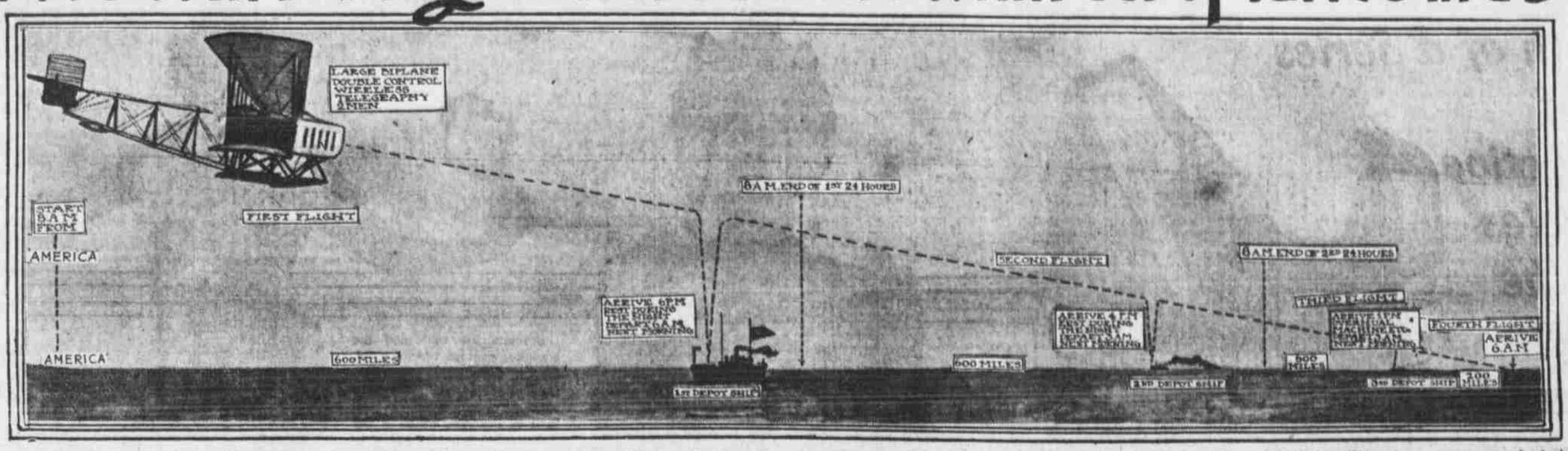
How We Will Bridge the Atlantic with Aeroplanes in a Day.

To Capture the $250,000 Worth of Prizes Offered for the First Aerial Trans-Atlantic Voyage, Aviators the World Over Are Now Devising Plans. One of the Most Promising Is Illustrated Here.



This Plan Provides for Three Depot-Ships to Be Stationed 600 Miles Apart. The Aviator Will Alight on These Depots for Rest and Fuel. This Plan Would Take 72 Hours for the Trip, but Would Be Practicable with Existing Apparatus.

FOR the man who succeeds in making the first aerial passage from America to England await prizes amounting to nearly a quarter of a million dollars. All over the civilized world aviators are perfecting their plans for entering the contest. No flying machine yet devised is equal to the task of making the flight in safety, but several plans have been suggested by which the feat might be accomplished by the adoption of ideas which the science of aviation has already developed.

The problem has been approached from various angles, but the most promising have resolved themselves into two. The first suggestion provides for a trip in three stages, the aviator arranging a series of depot ships at certain positions on the line of passage at distances six hundred miles apart. At these depots, the aviator will stop to rest, to overhaul his machine before commencing his flight early the next day and to take on a fresh supply of fuel and food.

In the event of adverse weather, it will be possible to remain at these havens of safety for almost any length of time before proceeding with the journey. The location of these depot ships will be made known to the aviator by means of charts, compass and wireless telegraphy.

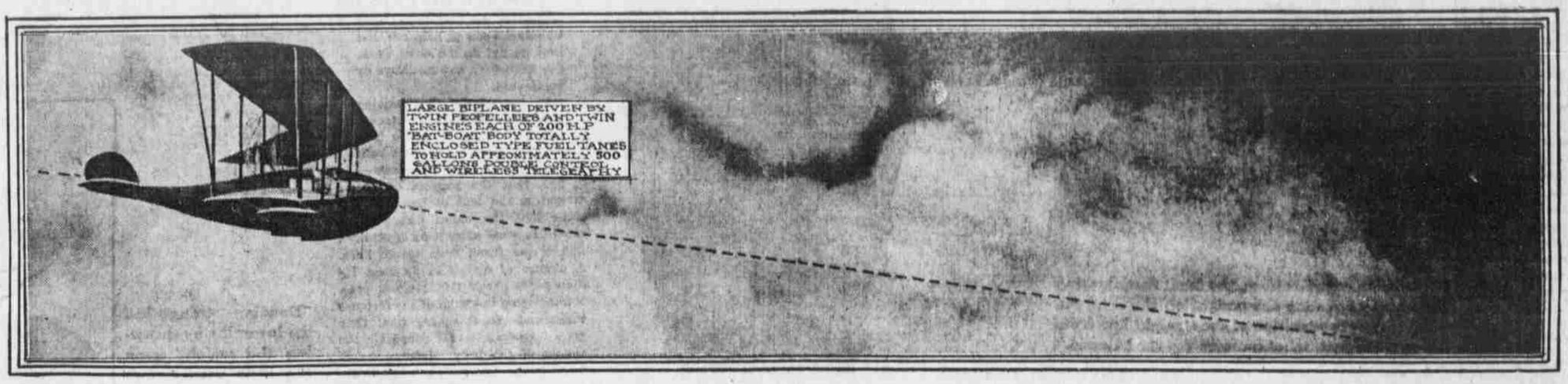
The distance from Newfoundland to the Irish coast is about 2,000 miles. Travelling at an average of eighty miles an hour, the aviator would be able to make his first depot ship, located 600 miles from the starting point, within seven and one-half hours. The second and third depots would be made in even less time because full speed could be maintained from depot to depot, whereas in leaving the coast it would be necessary to proceed at first at a comparatively low rate because of the danger of collision with coast-wise and other vessels.

The trip between the first and second and the second and third depots might, therefore, be made in seven hours flat, a speed of eighty-five miles an hour being attained.

From the third depot to the Irish coast, a distance of some two hundred miles, would be made easily within two hours and a half, travelling at an average speed of eighty miles an hour. This would complete the trip within twenty-four hours.

But it has been suggested that the whole journey might be made in one continuous flight. This would involve the building of an exceptionally large and powerful biplane, entirely different in many ways from those hitherto constructed. One plan proposed to have a boat-shaped stepped body totally enclosed to protect the pilots from the strong continuous wind current. The wings would probably be made on the Dunne method—a system which makes the machine automatically stable as already demonstrated in England and France. This method has also been followed in most of the recent German craft.

The Plan to Cross the Atlantic in 24 Hours in a Continuous Trip Would Involve the Building of an Aeroplane More Powerful Than Any So Far Conceived.



An Average Speed of About 85 Miles an Hour Would Have to Be Maintained to Make the Trip in a Day, but This Would Be Quite Possible with a Powerful Aeroplane.

My Secrets of Beauty

By Mme. Lina Cavalieri, the Most Famous Living Beauty.

No. 226—The Education of the Leg

THE leg is one of the most beautiful parts of the human body, for from the rounded hip to the slender ankle it makes up a most harmonious whole, whose roundness develops with progressive amplitude to express at one and the same time solidity and strength, and distinction and fitness.

It is armed with two bony processes which are like the relays of strength; the knee and the ankle. They may also be compared to two powerful springs, brought into action by the will.

For the leg to be beautiful it must be long and straight, not heavy, with no fatty lumps, looking as if no amount of labor could tire it.

Even though the beauty of the leg itself escape the notice of others, they nevertheless have many opportunities for appreciating your lightness of motion and the elegance with which you use your legs. They give woman her carriage, and there is nothing by which a woman can attain a greater effect than in her bearing.

Therefore, devote yourself especially to the preservation of the plastic beauty of your legs, to their whiteness, the softness of the skin, and at the same time do not fail to educate your legs, to exercise them so that they perform their office without any apparent effort, that office of supporting and bearing the body firmly yet gracefully.

Those persons whose feet are diseased or who wear badly made shoes will certainly walk badly, but those whose legs are not exercised well or are weak from inaction walk very much worse, for not only are their steps ill regulated, but the movement at the hips is abnormal and cramped, spoiling all of the harmony and charm. Naturally gymnastics are necessary to give the leg suppleness and ease of action. But it will suffice if certain exercises are taken daily to give them the proper suppleness and keep them strong and elastic.

Here are some exercises from which you will derive most rapid benefit:

First—Standing erect with both hands on the hips, kick each leg forward as high as possible, standing firmly on the other foot.

Second—Rest the right foot on a stool and stand very straight on the left leg, at a distance of eight inches from the stool. Bend the body forward until you touch the right knee, then return to the normal position, then bend your chest backward and return again to erect position. Repeat this exercise at least ten times, standing in turn upon each leg, the hands on the hips.

Third—Bend down so as to sit on your heels while holding the torso straight. During this exercise you may hold the hands on the hips or push the arms forward horizontally.

Fourth—Lift the right foot to the height of the left knee, then push the right leg forward and to the right until you touch the floor with the heel, while you stoop slowly, by bending the left knee, not curving the body. Repeat this movement several times, alternating from one foot to the other, having both hands upon the hips.

Special Directions—Be very careful not to use massage on the legs. Only in case of accident and when the specialist prescribes massage as necessary for the elasticity of the joints should it be resorted to. This is medical massage, altogether different from that used for other parts of the body, for beautifying purposes. Gymnastics should altogether take the place of massage so far as the legs are concerned.

Be sure to keep the legs perfectly clean. Your daily bath will do this. After the bath rub the legs dry with a rough towel or the friction glove from the feet upward. Rub afterward with alcohol applied with the bare palm. Never let the legs remain bare, but put on stockings at once when you rise in the morning or after the bath, unless you jump into bed at once. When taking the daily foot bath you may continue the washing up the leg, soaping it thoroughly.

The Knees—So that the knees do not spoil the appearance of the leg they must be neither too prominent nor too round. If too prominent they show weakness of articulation; if too round they give the appearance of heaviness.

It is true that the knees, as part of the legs, form a part of the secret plasticity of the body and give no special distinction to external attractiveness, but a woman gives care to their beauty for her own personal satisfaction most of all. This consideration is important, but it must not overbalance our attention to the knees on account of their frailness. Many colds, pains and indispositions are contracted through the knees. The knees should always be kept warm. For this reason all who have the least tendency toward rheumatism should wear knee-warmers. These woven bands are put on under the stocking and are hardly perceptible.

It has been said that for the knees to be beautiful they should be in a straight line, projecting neither outwardly nor inwardly, this is when the legs are placed together, heels touching, thighs tense.

To overcome hardness of the knees apply a poultice of breadcrumbs every evening. Tie it on so that it stays in place all night. This hardness will not occur if the knees are bathed and rubbed immediately afterward every night. Glycerine and lemon may be used successfully to avoid any callosities on the knees. They may also be rubbed with verjuice (the sour juice of green grapes).

Garters—The old-fashioned garter is absolutely proscribed by all authorities. The garter running to the corset has taken its place, and the double kind should be used, because it holds the stocking in place well and at the same time keeps the corset in place over the hips and stomach. The old circular garter interfered greatly with the circulation of the blood and should not be used at all. Do not be afraid of pulling the suspension garter tight, for they should hold the stockings without a crease.

Varicose Veins—Do not consider varicose veins as trifles, for while in themselves they are not dangerous, they show that great precautions should be taken on account of the fragile condition of the circulation. They come from some compression of a vein. The blood finding it difficult to make its way toward the heart spreads out and dilates the vein, which has a certain amount of elasticity. They show themselves externally by more or less violet-colored swellings. When varicose veins have reached a certain stage of development on account of strains through walking too much or standing too long, fissures may occur, or even ruptures, which are very dangerous if not attended to at once. If you have varicose veins do not walk too far; abstain from violent exercise. Be careful not to stand too much. A normal walk is never harmful.

Cold is very harmful to legs with varicose veins. Warm skirts should be worn, and even equestrian tights in Winter. Rubber stockings are also to be recommended to those with very large varicose veins, or bandages of wool.

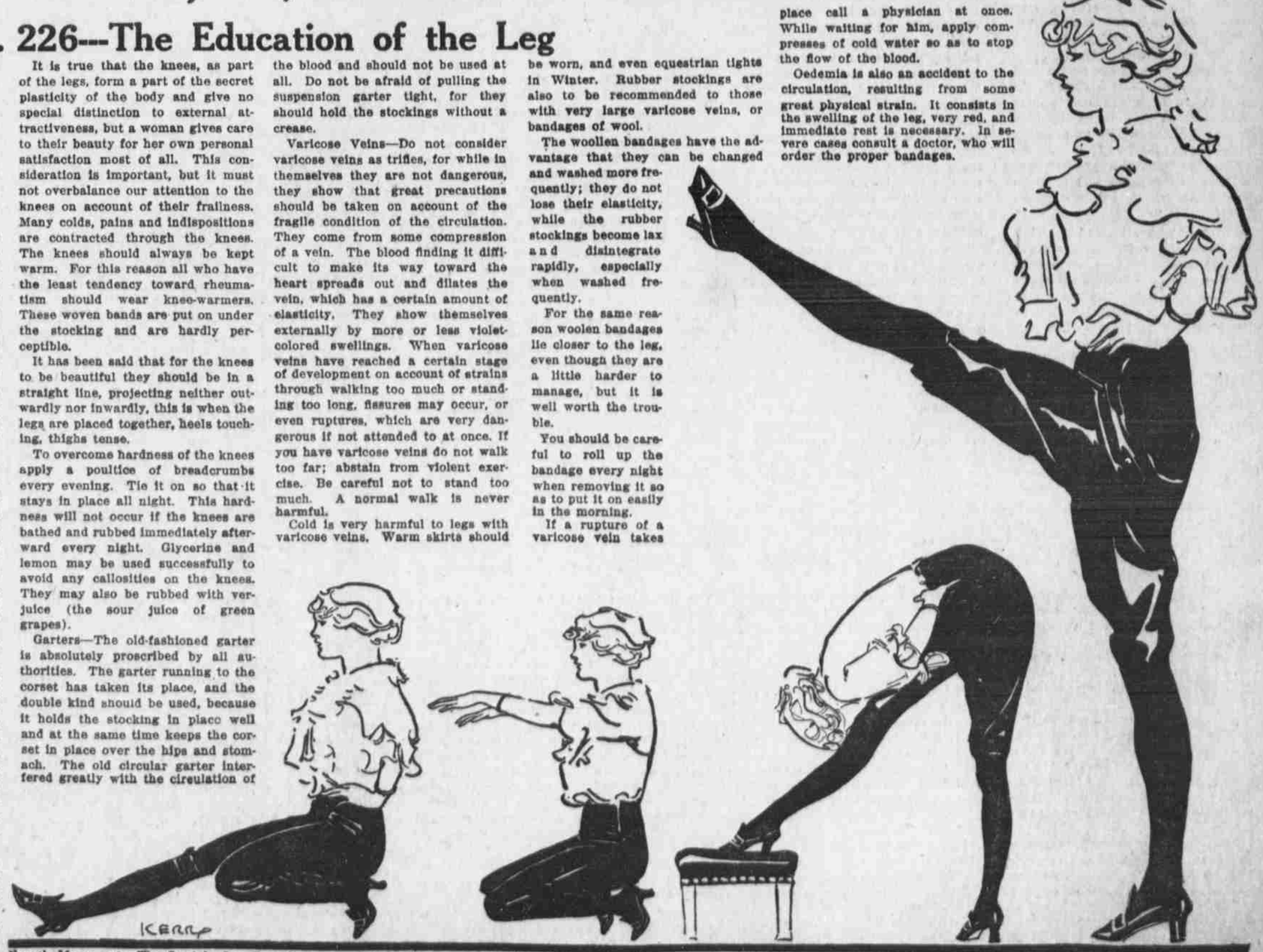
The woollen bandages have the advantage that they can be changed and washed more frequently; they do not lose their elasticity, while the rubber stockings become lax and disintegrate rapidly, especially when washed frequently.

For the same reason woolen bandages lie closer to the leg, even though they are a little harder to manage, but it is well worth the trouble.

You should be careful to roll up the bandage every night when removing it so as to put it on easily in the morning.

If a rupture of a varicose vein takes place call a physician at once. While waiting for him, apply compresses of cold water so as to stop the flow of the blood.

Oedemia is also an accident to the circulation, resulting from some great physical strain. It consists in the swelling of the leg, very red, and immediate rest is necessary. In severe cases consult a doctor, who will order the proper bandages.



Fourth Movement—The Straight Leg Exercise. Third Movement—The Kneeling on Your Knees. Second Movement—The Stooping Lesson. First Movement—The Forward Kick.