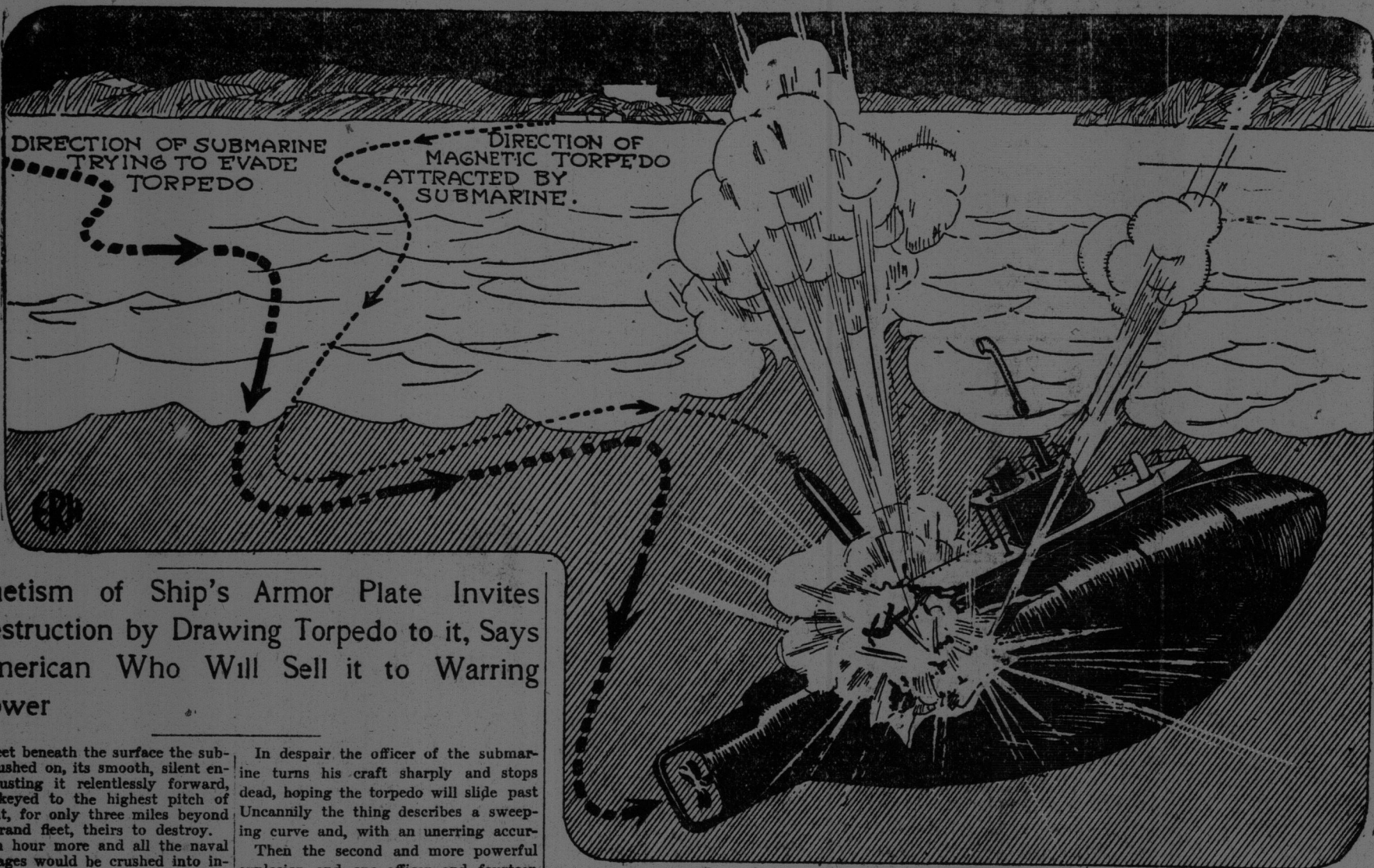


## MARVELOUS MAGNETIC TORPEDO SPELLS DEATH FOR SUBMARINES! INVENTOR ASSERTS NEW WEAPON WILL DESTROY FLEETS OF WORLD



### Magnetism of Ship's Armor Plate Invites Destruction by Drawing Torpedo to it, Says American Who Will Sell it to Warring Power

Fifty feet beneath the surface the submarine pushed on, its smooth, silent engines thrusting it relentlessly forward, its men keyed to the highest pitch of excitement, for only three miles beyond lay the grand fleet, theirs to destroy.

Half an hour more and all the naval glory of ages would be crushed into insignificance beside the achievement of the X-81.

But what is that torpedo like object that follows?

Discerning it, the commander signals for a sudden dive. The thing dives also.

In despair the officer of the submarine turns his craft sharply and stops dead, hoping the torpedo will slide past. Unaccountably the thing describes a sweeping curve and, with an unerring accuracy, then the second and more powerful explosion and one officer and fourteen men—actors in the most supreme drama the twentieth century can produce—go down in history as missing.

Not only is such an incident possible, but highly probable as a determining factor in the war. And again electricity—magnetism—is proving itself the mighty element. An American, Allan A. Canton, has perfected a torpedo which he says, needs no aiming. The heavy steel hulls of the dreadnoughts themselves insure accuracy to the new demon of the deep which spells their destruction.

Magnetism is the guiding power of his torpedo, which, speeding nearly fifty miles an hour will pick out the largest battleship of a fleet and send it a mass of wreckage to the bottom.

Inaccuracy has been the curse of the torpedo, Canton says, and 70 per cent of those discharged at moving targets fail to hit.

As the proximity of a steel ship alone is sufficient to guarantee a bull's eye, the new torpedo, therefore, is 100 per cent deadly.

acy, comes directly at the larger craft. There is a crash and through the amidships of the submarine's steel plates comes the nose of the torpedo and water. For just two seconds does the crew live—just long enough to know there is no escape.

Canton has made more than 200 tests under all conditions and says that he has never yet failed to score a hit. The target each time was a motorboat run

Diagram showing shape and general appearance of Canton magnetic torpedo. In appearance it resembles very much the ordinary torpedo. It has two arms of nickel silver attached to each side, projecting at right angles, at the ends of these arms are magnetic coils. A high frequency current passes through them and the presence of any mass of metal charges the self-induction which affects the electric relays.

These, in turn, operate the motor. In appearance it is hardly different from the ordinary torpedo now in use, except that it has two arms of nickel silver attached to each side, projecting at right angles. At the end of these arms are wire magnetic coils. Upon these magnetic coils hinges the success of the torpedo. A high-frequency current passes between them and presence of any great mass of metal changes the self-induction which affects the electric relays, and these in turn, operate the motor which controls the rudder. Thus the torpedo will steer for its target and follow it, no matter how often the target changes its course.

The gyroscope, which keeps the torpedo on an even keel and on a straight course, is effective until the torpedo comes within magnetic range of a ship. Then it is automatically cut out, and the torpedo's diving fins turn to make the machine dive deeper and strike the warship on the unarmored portion of the hull.

A warship's armor plate extends only a few feet below the water line. The torpedo carries the regulation war head with a charge of 800 or 400 pounds of wet gun cotton. Its first explosion sends it through the hull into the ship's vitals, and the second explosion tears the hull to pieces. No ship can remain afloat more than ten minutes, the writer says after being hit.

Held in leash by a cable two or three miles in length, an uncharged torpedo could be used to hunt out mines and halt over the spot until the ship caught up and destroyed them with shells.

Canton declares that the warring powers are now bidding for his invention. Germany has offered an enormous sum, he declares, but, as he is pro-British in feeling, he is likely to accept a lesser amount from England.

The inventor declares that he offered it to the United States, but the navy department took no notice of it. He is now working on a plan to utilize his invention in some kind of an aerial torpedo to destroy airships.

Diagram indicating how zig-zagging, resorted to by warships and others in trying to escape a torpedo or mine, proves useless when a magnetic torpedo is approaching or following. The magnetic torpedo, traveling 40 miles an hour, follows the submarine automatically until overtaken.

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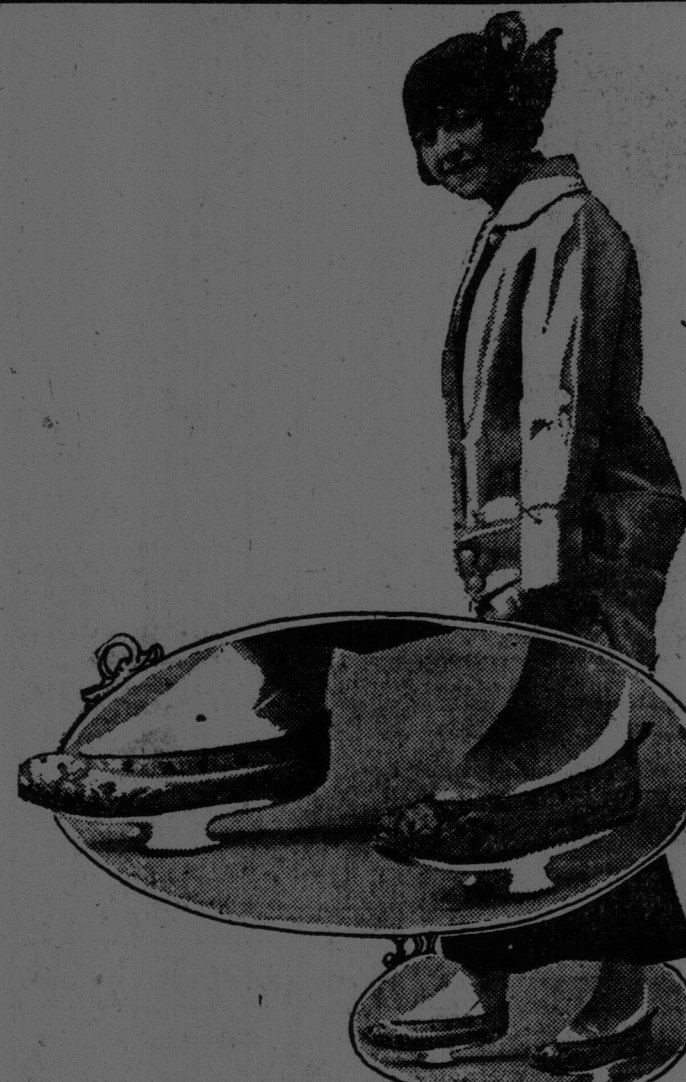
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## RAINY-DAY SHOES FROM CHINA-LAND



Rainy day shoes recently made their appearance in New York, and a darling young woman who introduced the style says they are better than goloshes and prettier.

The shoes which attracted so much attention when a young woman noted for her extreme taste in dress patterned down Fifth avenue with them recently, are everyday wear for Chinese women. They are gaudy little things, but they surely do keep the feet dry.

### The Going Out and The Coming In



This blouse gives way to— This one.

## SPRING STYLE CALENDAR INDICATES RADICAL CHANGES IN CUT, COLOR AND ARRANGEMENT OF WOMEN'S WEAR



No. 1—New wash suit with Florentine embroidery; model originated by Marshall Field & Co.

No. 2—Reproduced from a Primet design—an afternoon suit in white gabardine, embroidered in white; reproduced by Marshall Field & Co.

No. 4—Tailored street dress model; has plain, white satin vest; showing the new flared skirt; model originated by Marshall Field & Co.

No. 5—New model in serge street dress with applique embroidery and showing the new flared skirt; model originated by Marshall Field & Co.

(By Mabel Mortimer.

Chicago, Feb. 15—Styles for Spring! What will women wear in 1916? The array is imposing and interesting. Most of the styles created in America have been adopted by women of wealth. The reduced number of models filtering through from Paris are swamped in the cabinets filled with American creations, now being shown in the big New York and Chicago shops.

SHOES. New showings in women's footwear plainly indicate a military trend. Brass buttons and in some cases braid are profusely used. Low shoes are of the colonial type and have short tongues. Cloth will be used on the low shoes and colors will be popular.

COLORINGS. Colors will vary considerably, though the duller shades predominate, especially for street wear. White and black are popular and these shades are often combined with striking results.

HATS. The small hat has won all honors so far. Smart euliers, toques and tricornes are seen everywhere. Floral trimmings are popular and much braid is being used. Feather effects are quite popular.

PETTICOATS. Petticoats are seen with full or circular flounces. Chiffon taffeta ruchings and pleatings used for trimmings. Colors follow the outer apparel.

MATERIALS. Sport coats apparently will have a popular season most of these being of fancy design in woolsens. Poplins, gabardines, covereds, worsteds, etc., are most popular.

SLEEVES. Sleeves are full length and fit closely. Dancing frocks and evening dresses are sleeveless, though the former usually have sleeve caps.

RIBBONS. Both in millinery, on dresses and trimming ribbons will be popular. The stripe and the check seem to form the bulk of the most popular designs. We have many of our new spring ribbons on display.

DRESSES, SUITS. In suits and dresses, the skirts have box and side pleated effects and are leaning to the circular forms. The style period for these garments is 1893.

VEILS. To be worn, draped and fancy styles with borders apparently lead.

SKIRTS. Semi-tailored styles are the last word in separate waists and as a rule the normal waistline is seen. The high waistline however, is permissible in dress waists. Many waists are of the semi-fitted order.

SKIRTS. The fuller skirt has fairly swooped in popularity in nearly all the high class

## Styles In Braids For The Miss Who Puts Aside "Little Girl" Fashions



(By a Woman Editor.) "I'm just sixteen and I want to do my hair up. Will you tell me some pretty way to wear it?" writes Miss Sixteen-Year-Old.

And from Miss Fourteen-Year-Old comes this query: "I'm fourteen now and don't think I'm too old to wear my hair in braids?" Fourteen is so much afraid of being counted among the kiddies!

A serious affair is this "doing up" in braids to the girls who are slipping models the skirt is exceedingly full and wide. While the waisting is raised considerably, it is normal in many cases.

GLOVES. Embroidery effects top off the latest novelties in gloves. Soft colors and half novelties are common.

PARASOLS. Bright colors and brilliant designs will be in order. Cordings are in evidence.

CHILDREN. The new coats are high-waisted and saw a tendency to follow the styles for elders. The 1820-30 period influence is evident.

COATS. Belts predominate in the stits for spring, either placed at or above the waistline. Flare effects are common.

from girlhood to young ladyhood—some of them are so eager to put aside their little-girl fashions and some are so timid about assuming grown-up airs!

To Miss Sixteen we would recommend the coronet style of hair dressing as a happy compromise between the fashions of a little girl and a big girl. The coronet is more womanly than braids and it is almost always becoming. The only girl who must twine her braids about her head is the girl with the long, thin face and the rather long nose. She should draw her hair softly back about her head, part it at each side just back of the ear, roll each strand into a flat little "wheel" just above the ear at a becoming distance from the forehead. The strand at the back may be made into a third little "wheel" or twisted into a figure eight.

To make the coronet the hair should be divided into two strands and each made into a braid. It should be stuffed

out softly around the face, the braids crossed at the nape of the neck, brought around the head and crossed smoothly on the top, great care being taken to tuck in the ends so that the coronet will look like a smooth circlet of hair. A barrette will hold the braids firmly in place at the back of the neck, and two small hairpins—not the ornamental, jeweled kind—will give the braids firmness at the sides. Of course, several small hairpins will be needed to hold the coronet in place.

But Miss Sixteen is none too old to wear her hair in braids, especially if she tucks them up as shown in the upper left picture and use a pretty barrette to hold them in place in the back. This same style is very good for the girl of fourteen, but better still for the younger girl is the single braid tied with a bow of ribbon or with those convenient little shell clasps that are sold in almost every department store for a dime.

To arrange the hair as it is shown in the upper left hand picture part it in the middle, divide it in three strands, puff out the two side strands so that they make a soft frame for the face, draw them back and fold the ends to the back strand and then braid the three in a loose but firm braid, tuck the "pig-tail" up and fasten it with a barrette or three or four small hairpins. A comb or barrette, however, will add to the attractiveness of the braid.