

THE POETRY OF THE SEARCH-LIGHT.

ILLUSTRATED BY FRED T. JANE.



"ALL THE AIR IS FILLED WITH A BLINDING LIGHT, APPARENTLY CIRCLING ROUND AND ROUND" (p. 164).



WHEN the "bloodless warfare" of the naval manoeuvres is in progress countless stories are told along the coast of the havoc wrought by the electric search-light. Romantic walks on lonely cliff paths are disturbed by a flash from the deep. Night is turned into day, and chanticleer feels in duty bound

to apprise his neighbours of the fact. The gas burning on parades and sea-walls pales its ineffectual glare, and the dazzled, winking watchers of the strange lights from the sea are unfeignedly thankful when the beams are turned in some other direction. So far they have experienced its prose, now they may hope to see something of what may well be called its poetry. The weird mystery of its ever-changing effects, whose infinite variety is constantly presenting familiar objects in a new aspect, the strong light and shade of its pictures, and the rapidity with which they succeed one another, combine to produce on their observer an impression as lasting as it is impossible of exact repetition.

The advantages or disadvantages of the search-light in the dread event of war belong most decidedly to the ultra-prosaic side of its character.



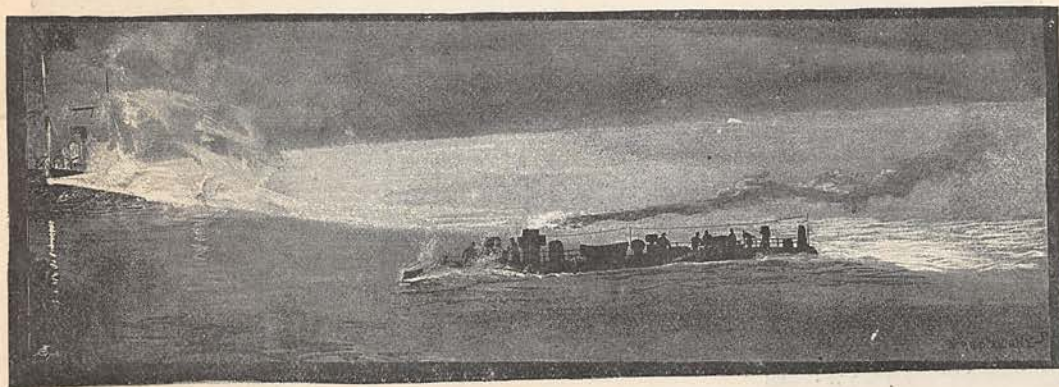
WORKING THE SEARCH-LIGHT.

Experts are at variance on the question, and expressing the hope that it will long remain of purely academic interest to European nations, we are content to leave it in their hands. We are concerned only with the strange effects of light and shade and the peculiar tricks of form and colour which are produced by the use of the light and which would presumably be the same in time of war as in these "piping times of peace."

Whatever effect is produced by the light on observers on the shore is certainly not lessened when the search-light is brought to bear upon observers at sea. From how near or far none of us on the ship can do more than guess; a beam of light shoots hither and thither over the dark surface of the ocean. Suddenly the beam is lost, and in place of it we see a bright and blazing star. And then all the air is filled with a blinding light, apparently circling round

passing through a beam and is speeding towards us. Now, in time of war, would be the "psychological moment" for the guns. But we are anxious only to keep the on-coming boat under observation. She is travelling fast, and we have to shift the light rapidly. Once again the beam falls upon the water, but it catches only the stern of the stranger, making it tell as light grey against dark. Nearer and nearer hastens the boat, darting this way and that in a vain endeavour to elude the blinding ray of ghostly light which follows her relentlessly. The weird mystery deepens as the space between us grows less, and distance, form, and colour are distorted and lost. As often as not we see from behind the light the boat which it is covering, as though it were travelling in the air or upon the bulwarks of our own ship.

Weird and startling as is this effect, it is far surpassed by that which is given by the search-light



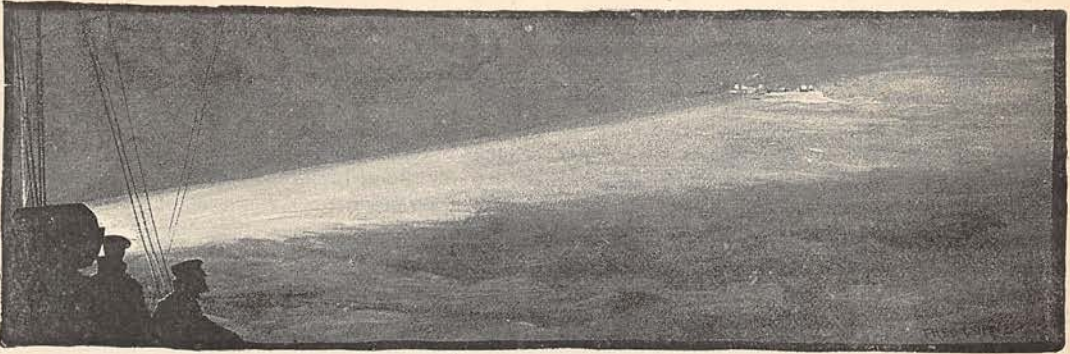
CAUGHT!

and round, and forming a pathway direct to the star from which it comes. It is only for a moment. As suddenly as it came upon us it has gone, and we feel that even at sea, where night *can* be dark, we have never known before what darkness meant.

Probably our ship is one of a squadron, and is fitted, like her consorts and the vessel whose light has broken so mysteriously upon our darkness, with a search-light of her own. This will be quickly brought into play, and its beams in their turn will dart hither and thither across the dark waters in search of the ship from which the strange light flashed. In this progress the beams will cross and recross the lights of other ships, and will show at one minute dazzlingly opaque and the next as a transparent film. Every eye is turned to the quarter whence the first light flashed upon us. If the light come from a torpedo-boat and fortune favour us we shall sight the boat in a few minutes, but it may be an hour or even more before we do so, for her commander, if he wished to escape detection, would naturally avoid the direct path of the light from his ship. But, sooner or later, telling blue-black against the light beyond her, we catch sight of the low-lying boat, which is

when it throws, as it often does, huge shadows on the sky. Not every state of the atmosphere is favourable to this phenomenon. Fog or smoke must be present in the air, which will then, being made opaque or semi-opaque, take the imprint of a shadow almost as surely as a blank wall on shore. Just in the same way one often sees on the water, when the sun is shining, the sharp shadow of a ship, formed where there is foam, though as a rule the water, being as transparent as the air, will not take a shadow. The same thing takes place with the search-light, only the light being so much nearer to the object than are the clouds upon which the shadow is thrown, the shadow often appears many times larger than the original, and a tiny boat will give a shadow moving along the clouds like a gigantic ghost ship.

Another curious trick of shadow is played by the search-light when the shadow is thrown upon a cliff or upon another ship. In that case, owing to the concentration of light, the shadow stands out by force of contrast apparently intensely black. The general weirdness, and destruction of form and distance, play their part in the illusion, no doubt. But when the shadow is that of a small boat, it is difficult at first



ALMOST TOO LATE.

to say which is substance and which shadow. So complete is the illusion at times that Admiral Sir Nowell Salmon, in the early days of search-lights, once chased what he thought was another boat under the cliffs of Milford Haven, only to find after he had gone a considerable distance that he was pursuing the shadow of his own torpedo boat.

If instead of looking from behind the beam of light we look across it from any distance, another curious trick of shadow is to be seen: the masts and yards of a vessel caught in the beam will cast a shadow on a

cliff or coast a mile or more away, and will even, under peculiar circumstances, tell on the beam itself as deep blue bars along the silvery grey. The beam is actually straight, but sometimes from a distance it takes the form of a slight white curve athwart the sky. Of course this is another illusion, due, in all probability, to the refraction of the light in passing through the different layers of atmosphere, more or less moist.

Strangest, in some ways, of all the spectral effects of light and shade which the search-light gives is one



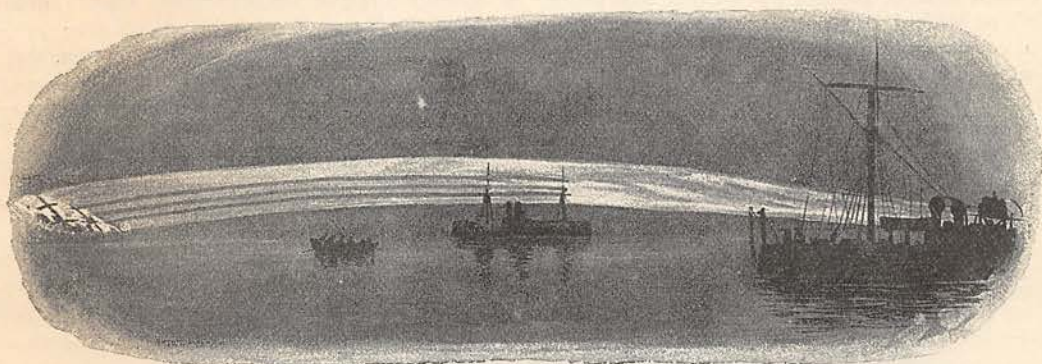
ABSOLUTE DESTRUCTION OF FORM AND DISTANCE, CAUSED BY SEARCH-LIGHT.

which was often displayed at the Naval Exhibition—though it would hardly be fair to take the apparatus used there as fully illustrating the powers of those in use in the Navy. Falling upon the water, the beam of light is reflected to the sky in the wildest, weirdest manner. Sometimes one edge of the beam comes out sharply and the other is lost, more often the whole is vague and blurred, but always the scene is weird almost beyond description.

Just as shell may be answered by shell, and a torpedo attack be returned in kind, so may flash be responded to by flash, and beam meet beam. In warfare the search-light should prove very useful in keeping under observation an attacking boat, and one's first thought is she would inevitably serve as a splendid target for guns fired from behind the light. But what if the attacking boat could turn on a search-light as well as the attacked? Everything would then appear blurred and uncertain to the gunners, who

would be in an even worse predicament than the Bisley marksman with the sun in his eyes.

It would be impossible to describe the effects of colour produced by the search-light when turned directly towards an observer, some of which are, of course, common to arc lights under all circumstances. The normal ray is a silvery white, but when the light burns badly, the ray appears surrounded by prismatic colours, among which violet is predominant. As a rule, those portions of the ship using the light that are caught in the ray stand out in a beautiful rose-pink. The water, where the light touches it, seems an intense, almost buttercup yellow fringed with emerald green, and shading off into deep blue-black shadow. No painter has yet attempted to grapple with these changing hues and strange effects. They are vivid almost beyond belief, and add in no slight degree to the poetry of the search-light.



STRAIGHT RAY, APPARENTLY CURVED (p. 165).

JACK AND JILL.

A ONE-CHAPTER STUDY IN HUMAN NATURE.

I THINK you're *horrid!*" said Jill from the sofa, where she reclined in semi-invalid style, one foot encased in bandages—"downright *horrid*; yes, I do!" and her tone was suspiciously like tears. "*I* wouldn't go away all day skating by myself if *you* were ill and had to lie by. I'd stay home and be good to you, I would."

Jack, the young man addressed, was at the table, tying up some sandwiches cook had cut him. They would not pack tightly and evenly; truth to tell, he missed his little cousin's nimble fingers, which generally performed such-like small offices for him. But he could not ask her help now; she was so cross, he muttered, as he tied the string at last around a certain curiously-shaped package, from which any sandwiches must inevitably issue much dilapidated.

Sundry pricks made themselves felt in a hidden portion of John Ashton junior's frame, but impervious to their action, he assumed a lordly manner, and remarked: "Yes, that's just like you girls—dog-in-the-manger creatures! You'd make a fellow stay home a frost like this just because you were such a silly-ninny as to fall down and twist your ankle yesterday. You wouldn't have done it, either, if you hadn't been trying to beat *me* racing—which, of course, you couldn't."

This was too much for the heart of woman-child to bear. To lose the fun of skating; to have a bad aching pain all up one's ankle and leg; Jack to be angry; and, moreover, to be called a silly-ninny, when she had borne the nasty sprain without one cry yesterday, and had even limped painfully off the ice, and climbed part way up the bank with white determined lips, until she slipped down almost unconscious from the pain, and was picked up and carried home by a strange gentleman.