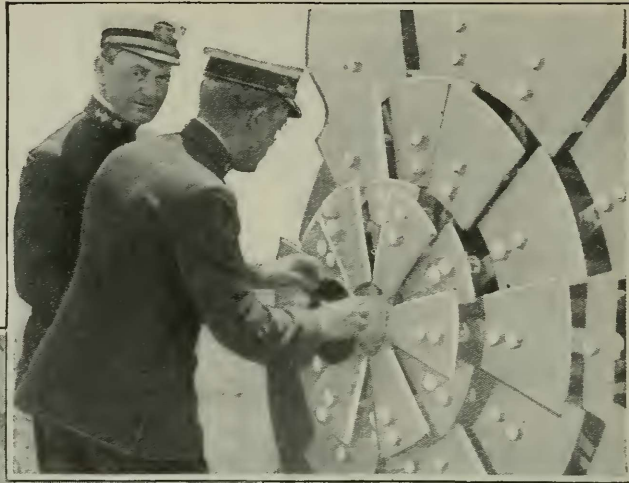
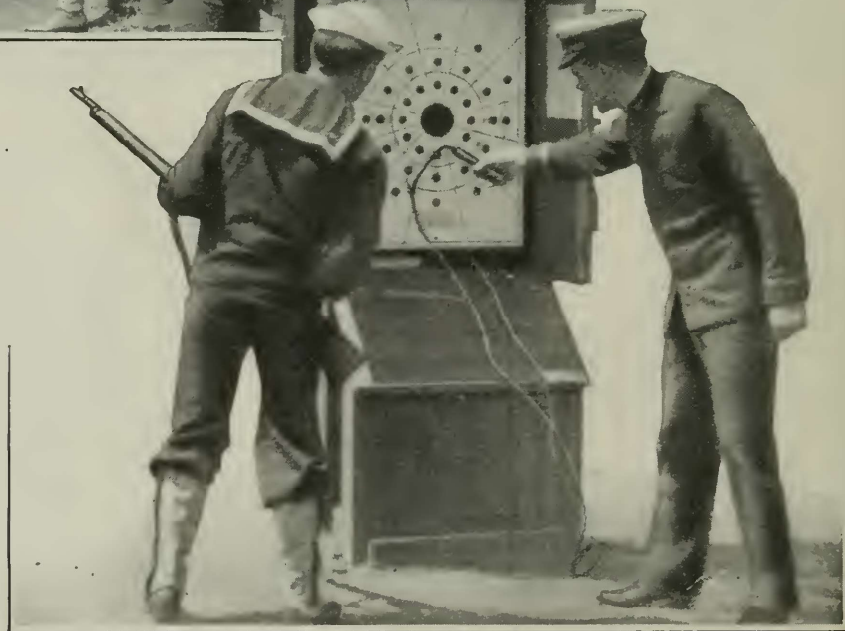


Seeing Your "Hits" Half a Mile Away

The electric target of steel is shown on the right. The bulls-eye is black and the outer circles are set behind it, in lapping arc-shaped leaves. When a shot hits, an electrical contact is closed and indicators show automatically the exact section of the target where the shot struck thus rendering it unnecessary to post men at the target to signal back the hits



As each shot is fired, the electric contact registers, and the marksman can see at once not only in what ring he struck, but whether it was to the right, left, above or below the bulls-eye, so that he can correct his range or his aim to suit. The interest which is thus aroused and the greater advantage to the marksman in knowing exactly the direction in which he was "off" make the new target exceptionally valuable in training marksmen



Saving Steps at Target Practice

AN electrical target that signals the exact accuracy of the marksman to an indicator on the firing line has been installed on the shooting range of the United States marines at San Francisco, Calif. The method of signaling the accuracy of shots which is now employed on nearly all government ranges is not at all satisfactory, as it is difficult to convey to the man on the firing line the explicit information of the closeness of his shot to the bull's eye.

An elaborate system of flag and disc signalling is usually employed. This requires, at least on the long distance ranges, the use of field glasses. When the marksman fires a shot at a target, the "spotter" in the distant pit lowers the target and raises a signal to denote the numerical accuracy. A white disc denotes a bull's eye; a red flag, a miss, with other emblems to denote whether the bullet pierced ring No. 4, 3 or 2.

This procedure requires a large corps of men both in the pits as spotters, and on the range behind the individual marksman, as scorers. Moreover, it is confusing, and there is no satisfactory way of signalling whether the bullet which missed the bull's eye went too far to the left or right; too high, or too low.

The electrical target, as it is called, corrects a great many of these faults, although its installation cost is considerably higher. In appearance, it resembles a number of large ventilating fans superimposed one upon the other, each one smaller than the one beneath it. The bull's eye is a thick metal disc, painted black, which extends in front, of the blades. Steel plate is used in the construction. Behind the plates are electric contacts.

On the firing line is an electric indicator, which, in design, is a replica of the target. Each leaf of the target is represented by a miniature electric lamp on the indicator. When a bullet strikes one of the blades of the target, the contact made closes an electrical circuit con-

sisting of batteries, a cable to the indicator and one of the lights on the indicator. The action is immediate, the marksman knowing instantly not only his score but the exact place on the target where the bullet struck, so that he can adjust his rifle sights to conform with wind and temperature conditions. The target and indicator are marked to resemble a clock face, following a long established practice on rifle ranges.



The enormous electric flat-iron float has taken its place as an important feature of all civic parades

An Electric Flat Iron Float.

AFLOAT that was conceded to be among the best of the one hundred and seventeen in a recent parade held by the business men of Liberty, N. Y., was a representation of a popular electric iron. It was mounted on a small run-about.

Following the business men's parade, the Firemen of Liberty held a parade and the "Iron" float was selected for participation as one of the best decorated in the previous event.

Realizing the advertising advantage, the company which made the float has had it mounted on the roof of the power house where it can be seen from all parts of the city.

The February Popular Science Monthly will be on sale Saturday, January fifteenth (West of Denver on Thursday, January twentieth).