

## Winning a Battle by Telephone.

**T**HAT the Japanese victory at Mukden was won by skilful use of the telephone is asserted by M. C. Sullivan. He believes that if the results had depended on mere bravery the issue might hang in the balance, and that it has been through the superior use made by the Japanese of ordinary devices of commercial and social life that they have been successful at every turn. He writes:

"One of the most remarkable events that has occurred in the world's history is the battle of Mukden, remarkable because it was the mightiest land battle ever fought, and startling because no victory was ever won by such scientific methods. Feats were accomplished by the Japanese never before contemplated in war, and which had been previously declared by military experts to be impossible. The success of the victorious forces was almost entirely due to the skilful use of what is today considered to be one of the most ordinary and commonplace among electrical instruments—the telephone.

"Formerly a large battle was to a certain extent a haphazard, hit and miss affair, the careful foresight of the most skilful general failing to take into account the many accidents and incidents which would in almost a moment alter the entire aspect of things and change a successful movement into an utter failure. Not so now, however, as by means of the telephone it is possible for the commanding officer to keep in touch with each individual unit of an enormously large army, and thus to make the best use of every portion of it, thereby obtaining the greatest possible effect with the least expenditure of energy."

That the battle of Mukden furnishes a particularly good example of such use of

the telephone is asserted by Mr. Sullivan. It was the belief of the Russians that the Japanese would not fight in the open. Playing on this belief Oyama used a movement through the mountainous country to the south and east to mask a flanking movement through the plains west of the city. To do this, his forces were disposed in a crescent ninety miles long and divided into five sections, each of which was in telephonic communication with the general staff. The Japanese General thus had his entire army in perfect control and operated it as a huge machine effecting his purpose and gaining a decisive victory. Says the writer:

"From the subdivisions of each portion of the army telephone lines were run to a portable switchboard, and from the various switchboards trunk lines were run to headquarters several miles to the rear. Thus the parts of each portion of the army were made to correspond with the subscribers of a telephone station in a large city the headquarters being analogous to the central station, to which the subsidiary stations are connected by trunk lines. . .

"The rapidity with which the Japanese established telephone communication was remarkable. Lines were laid in advance of the main body of troops, even when the army was advancing by forced marches, and perfect connection was maintained between the different divisions. Wherever the conditions permitted the reels of wire and the instruments were carried in wagons. The line was laid on the ground as rapidly as a horse drawn vehicle could advance. If the line so laid was to become permanent a detail came after the wagons at leisure and attached the wire to trees or hastily erected supports.