

By

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An article in the October 1941 Command and General Staff School *Military Review* by Colonel Martin C. Shallenberger entitled, "The Brunt of the Battle" asks the following question:—"What has become of the role of the infantry which was once the Queen of the battle, and the artillery which was her royal consort? Has its usefulness diminished? Is it to be relegated to the scrap heap?" The answer is summed up in the last sentence of the above article. "We must not overlook the ones who bear the brunt of the battle." An article in the *Saturday Evening Post* of February 28, 1942, by Mr. Hanson W. Baldwin entitled "The Queen is Dead, Long Live the Queen", implies a different answer. Both are correct. Mr. Baldwin in the *Saturday Evening Post* is speaking of the Queen as we knew her in 1918, and as the general public knows her today; Colonel Shallenberger in the *Military Review* is speaking of the infantry of 1942.

The picture on any battlefield has changed. New weapons and new uses for old weapons are in evidence. The Sunday morning quarterbacks see the long forward passes and the helpless situation of the defending team's line under such attacks. They do not see the big part played by the line of the offensive team. How is the big tackle, the field artillery, prepared to assist in launching these forward passes and in breaking up such attacks launched against their team?

In 1918 all division artillery was horse-drawn. It seldom moved faster than a walk, or three miles per hour. In 1942 the artillery of infantry divisions is all motorized and can average ten miles per hour at night and twenty-five miles per hour in daylight. In World War I the speed necessary to support foot infantry was attained and exceeded by horse-drawn artillery. Now with the shuttling of infantry divisions, with the armored divisions and motorized divisions and the possible use of field artillery as antitank weapons the speed requirement has been met. Not only has the means of transportation been speeded up, the field artillery weapons themselves have been greatly improved. The 75-mm gun is being replaced by the 105-mm howitzer. The 75-mm gun battery of 1918 consisted of approximately two hundred men and two hundred horses. This new 105-mm howitzer battery has only a little more than one half as many men; trucks replace horses in the proportion of less than one to ten.

The 105-mm howitzer, now the standard weapon for the light field artillery of the infantry division, has many advantages over the 75-mm gun which it replaces. Basic differences in construction permit this howitzer to swing through an arc almost eight times that of the old 75. Instead of moving the trail around the arc made by the trail log all you have to do is turn a hand wheel. Fire can be shifted from targets in one direction to targets appearing in another direction with more speed. This basic difference in construction permits greater accuracy for the first shots in the new direction. Firing at moving targets with this new

howitzer is thus quicker and more accurate. The advantages in supporting our own armored units and stopping enemy tanks are evident. The high explosive shell thrown by the 105-mm howitzer weighs over twice as much as that thrown by the old gun. This means a greater striking force against enemy targets with concrete or other protection. Against enemy personnel it means twice as many splinters flying around at a greater velocity and covering a larger area. While it usually is true that the weight of a weapon increases with the caliber, this howitzer actually weighs less than the 75-mm gun with its limber, and it is hauled by a truck that weighs little if any more than the six horses required to pull the 75. Like everything else in this year 1942 it costs about twice as much as the article it replaces.

The 105-mm howitzer is being produced in large numbers but we still have on hand many 75-mm guns. Many of our field artillery units are still equipped with the 75-mm gun and will be for some months. This 75, with its face lifted, high speed axles and a new carriage, is far different from the 75 of 1918. The range scale on that gun was graduated to only 5,500 meters. Digging a pit for the trail, using new ammunition and setting the elevation with the gunner's quadrant it had a maximum range of about 11,000 yards. The improved 75 with split trail and pintle traverse has twenty percent more range and a much wider traverse. It has most of the advantages of the 105-mm howitzer over the old French 75 except the weight of metal which it can throw.

While on the subject of weapons it should be noted that the 75-mm howitzer used in pack artillery of the new mountain divisions and in the horse artillery of cavalry divisions is a new and valuable weapon developed since 1918. The 75-mm field howitzer is the only field artillery weapon in the artillery of any type division which is pulled by horses. All horse-drawn artillery now is in G.H.Q. reserve, a rather startling statement of fact when one considers the reliance placed on horses as a means of artillery transport only a few years ago. Those who are not convinced that the horse has seen his day may take consolation in the fact that comprehensive courses in horsemanship are still being given at the Field Artillery School. It shows that our high command is not willing to concede the complete eclipse of that method of transport.

The 155-mm howitzers which we remember seeing in France in 1918 being pulled by eight horse teams are being replaced by new models, which have ranges and fields of fire much greater than the old 1918 models. The improvements are as great in proportion as are those of the 105-mm over the 75-mm gun. They are, of course, truck drawn. A new 155-mm gun is being produced to replace the 1918 French G.P.F. A recital of improvements would be merely repetition.

During the last war it was not unusual to attach one 75-mm gun or even a 75-mm gun battery to an infantry unit to be used as accompanying artillery. In 1918 with horse-

drawn artillery, when a gun pulled by a six horse team had to be accompanied by its caisson with a six horse team you can imagine the target offered to the enemy. It is obvious that their value to the infantry was open to question. Detachments like this also weakened the support capabilities of the division artillery; just that many fewer guns which could be massed on an enemy target. Artillery weapons on self-propelled mounts are the answer. These in proper numbers organically in each infantry regiment will give the type of support desired without weakening the division artillery. Forget the word artillery if you want to, in connection with these weapons, call them infantry cannon companies or tank destroyer battalions. The fact remains they are replacing artillery weapons as used in 1918.

Such weapons are now appearing. They will do much to develop teamwork between branches; this alone will make them valuable.

Weapons and ammunition have been improved, methods of transport have speeded up and the aids to effective employment have been improved correspondingly. Telephones are still the basic and most reliable means of communication but radio has taken its proper place in all artillery units. It has speeded up communications to keep pace with the greater need for speed in all operations. Vehicular radio sets, which may be removed from vehicles and used at observation posts, battery positions or by liaison personnel, are now part of the equipment of all firing batteries. Maps have been supplemented by aerial photographs. It is now possible to get an oblique photograph of a target area developed and delivered to a battery one and one-half hours after it has gone into position. These photographs can be used as firing charts and results have been astonishingly accurate.

Air observation, like everything else, has been improved. Aerial observation posts flown by personnel trained with

field artillery and manned by observers with similar training will soon be part of the division artillery devoting all their efforts to artillery observation. Indirectly such planes will be a great help to the division commander; giving him information he might not otherwise receive.

Now what do all these changes and improvements mean? It is obvious that the field artillery is better able to do its job of supporting the infantry, but the changes are more significant than that. Infantry regiments now have field artillery weapons, accompanying guns on self-propelled mounts. Cannoneers are now armed with a carbine instead of the .45 caliber pistol. There are no horses in the infantry divisions, all components use the same means of transport. What is a light tank or scout car if not an infantry machine-gun nest capable of rapid movement? What is a heavy tank if not a field artillery weapon plus infantry machine guns capable of rapid movement on the battlefield? The armored force, which Mr. Baldwin implies has replaced the infantry as the Queen of Battle, is nothing more than the old infantry division fighting behind the protection of heavy armor instead of from trenches, concrete machine-gun nests, and concrete Field Artillery gun emplacements. Decrease the yards of trenches, increase the machine-gun nests and the gun emplacements and put them all on wheels or track laying vehicles and you have the armored force. The significant thing is the development of teamwork and cooperation between branches.

The Queen is not dead; her royal consort, the field artillery, is building up its ability to help the Queen. Both are using basic weapons of the other. Specialists in both branches have common problems and work together to attain the best result. All of this develops teamwork and interdependence which is bound to result in greater efficiency and the winning of this World War II.

The God of War hates those who hesitate.

—Euripides: *Heracles*.

At Bautzen Napoleon sent a brief pencil note to Ney, telling him to be at Prietitz by 11 o'clock and to attack the enemy's right. Ney arrived in position at 10 o'clock, when he could have attacked the enemy's rear and probably destroyed the allied armies. He would not attack until 11 o'clock, and insisted on attacking the enemy's right according to the letter of his instructions. Ney missed the entire object of the maneuver which he executed; his connection with the whole operation had not been explained to him, and the failure was a natural result of the system in use at that time.

—Captain Eben Swift: *Field Orders*, etc.