

was no certainty as to when they would reach their destination, owing to the bad condition of certain parts of the railroads. Besides, supposing even that it had been possible to push these columns more forward by means of the railways, the keeping them in the various stations would have disorganised the service of the administrations and would have deprived them for a long time of a considerable quantity of the rolling stock.

It has been already mentioned that great facility existed for directly filling up at the depot the corps ammunitions columns, in this sense, that only a small number of wagons, and of ordinary trains were required for transporting the ammunition in boxes. The following was, with few exceptions, the method of proceeding in the valley of the Somme and in that of the Seine. As soon as it was foreseen that a battle was about to take place, a first telegraphic order was sent on to Soissons ordering a provisional preparation to be made for a supply of ammunition to be sent on. The preparations were thus always effected in good time; consequently on every occasion, even in the case where the expenditure of ammunition had been very great, the replenishment was always effected in good time. The last telegram contained the order for sending it on. It was sent immediately after the battle; the quantity of ammunition demanded was not based on the actual returns sent in by each corps in particular, but on an approximate estimate made on the field of battle itself by the adjutants going from one corps to another, and informing themselves summarily of the quantities expended. If it turned out that more was required, a message was sent to send on the supplement. If it turned out that an excess had been ordered, it was immediately ascertained whether the ammunition was everywhere complete, and then this excess was carried on to the rear, and placed on railway wagons. The wagons containing the ammunition could hardly remain on the railroads without interfering with the ordinary train service; consequently care was taken to put them on sidings, so placed that they could be easily approached by the wagons which were sent there to be filled.

When the operations developed themselves upon a larger scale, besides the depot of Soissons, intermediate depots were established, intended to act as points of replenishment, notably at Laon, Creil, Beauvais, Breteuil, Nesle, and Longeau, near Amiens. It was at Laon that the army was replenished from the 2nd to the 4th December, after the battle of Amiens (27th November, 1870).

The convoys of ammunition that had in consequence to be despatched from Soissons to portions of the army which were operating some upon the Somme in the direction of Amiens, the others upon the Seine towards Beauvais, were necessarily all obliged to pass by the stations of Creil. The idea was formed of establishing in this locality an advanced depot, which was the more convenient, as considering the situation of the place there was nothing to fear from any attacks of the enemy; and, on the other hand the munitions were pushed close up to those places where the replenishment was to take place. If it happened that in any corps *d'armée* there proved to be at any time some excess of ammunition, it was sent to Creil, where it was stored provisionally. From thence, should any eventuality arise, it could be sent back to the *corps d'armée*, the

quantities expended being rapidly replaced by means of the depot at Soissons.

The 22nd of December, the eve of the Malme, the officer commanding the artillery sent a telegraphic message ordering a convoy of ammunition destined for Amiens to be prepared.

On the evening of the day when the battle came off an approximate estimate of the quantity consumed was made, which estimate served to determine the size of the convoy; on the evening of the second day (24th Dec.) the station of Breteuil was fixed upon as the place where the replenishment was to take place. It was there the empty wagons were to be sent from the field of battle.

The first replenishment took place there during the succeeding days; the ammunition in excess was sent provisionally to Creil; then from thence it was sent a little later (28th December) to Longeau, near Amiens. There the replenishment was completed.

The bombardment of Peronne necessitated extra ammunition, which was demanded at Soissons by means of several telegraphic despatches. On each occasion the quantity required arrived at Longeau in a very short time. It was also at Longeau that the ammunition expended at Bapaume was replaced without the slightest delay, so that this nature of service was always performed without the slightest difficulty, in spite of the considerable expenditure which took place at Bapaume and Peronne. One portion of the ammunition employed for the bombardment of that place was replaced by the reserve ammunition column assigned to the third division of the reserve. This column was to be replenished at the depot of La Fere. The ammunition not expended remained at Longeau up to the 4th January; on that day it was returned to the Creil depot, considered to be a safer place than Longeau. The last circumstance which gave rise to the necessity for a replenishment of ammunition, was the battle of the 19th of January at St. Quentin. It was effected with the greatest celerity. The order for expediting the ammunition to Nesle was sent by telegraph to Creil during the night which followed the battle. That same evening the convoy of ammunition arrived Nesle at the same time as the empty wagons of the ammunition columns, despatched to the same place in order that they might be filled there. General Schwartz had, moreover, given orders on the field of battle that one-half of the empty wagons should be sent to Nesle and the other half to Soissons. Consequently, in case any hitch should have occurred in the train service on the Nesle side, one-half of the quantity required to complete the expended ammunition would be obtained from the Soissons depot. From there the ammunition columns had to fall back upon the army, which they certainly did, not regain until some days after. But, in fact, the Transport Service Company from Nesle having encountered no delay, the greater portion of the ammunition arrived in the vicinity of the army on the evening of the 20th, and the replenishment was enabled to commence at once.

For those portions of the *corps d'armée* operating on the Lower Seine, two small convoys were considered sufficient, which were sent by the Soissons Railway to Beauvais, at which town the empty wagons coming from Rouen were replenished, and the whole number of rounds were made up.

The accompanying table gives the total of the ammunition supplied by the different depots of which mention has been made to the reserve ammunition columns, and to the corps ammunition columns for the first Army:—

Column which receives the ammunition.	Shells.		Place of Replenishment	Column or Depot which delivers the ammunition.
	1-pr.	6-pr.		
Ammu'n column of the 1st and 8th Army Corps.	4,053	1,652	Laon	Reserve ammunition column of the 1st Army.
" " " " " "	1,081	1,477	Soissons	" " " " " "
Ammu'n column of the 8th Army Corps.	2,916	1,181	Breteuil	" " " " " "
Ammu'n column of the 8th and 1st Army Corps.	2,408	3,353	Amiens	" " " " " "
" " " " " "	6,211	3,600	Longeau	" " " " " "
" " " " " "	1,110	1,600	Nesle	" " " " " "
Ammu'n column of the 1st Army Corps.	1,064	467	Creil	" " " " " "
13th Ammu'n column of the reserve ammu'n park attached to the reserve division.	1,064	899	La Fere	" " " " " "
	19,766	11,293	Total of the reserve ammu'n employed during the operations of 1st Army in the North of France	
Cartridges for Cavalry.	623	...		
Cartridges for Carbines.	800	...		
Cartridges for Needleguns.	121,165	...		
	623	12,000		
	21,200	...		
	17,688	...		
	10,281	...		
	8,000	...		
	63,577	...		
	01,872	...		
	1,227,891	...		

All this ammunition was in turn replaced by a requisition emanating directly from the depot of reserve ammunition, by other quantities coming from Coblenz, Cologne, Minden, and Spandau, where the artillery depots were established. The transport was very slow; thus a convoy took seven days to go from Minden to Soissons, and fourteen from Spandau.

At the artillery depot, in Mayence, a quantity of arms captured from the French during the late war, consisting of muzzle-loading rifles with sword and bayonets, carbines with bayonet, cavalry pistols, and swords for subordinate officers, were sold at prices from \$3.30 to \$1.65 for the rifles and carbines, 25 cents for the pistols and 45 cents for the sword.