

HEAVY SIEGE ARTILLERY IN THE EUROPEAN WAR.

Three types of European Siege Artillery are shown in the illustrations on the following pages. The enormous development of protecting cover, due to the employment of armor plates and ferroconcrete in the construction of fortresses, has resulted in such a resistance to high angle fire that everywhere larger calibers are being introduced in order to reduce the time limit required to reach the protected defender and his guns. The extent to which this tendency toward large calibers is relevant to the needs of the United States is an interesting one. Ordnance designed especially for the purpose of reducing permanent fortresses in Europe does not necessarily have any place in our own armament; but we should not lose sight of the fact that this is an age of concrete, and that railroad iron and concrete can be quickly employed to strengthen any field work.

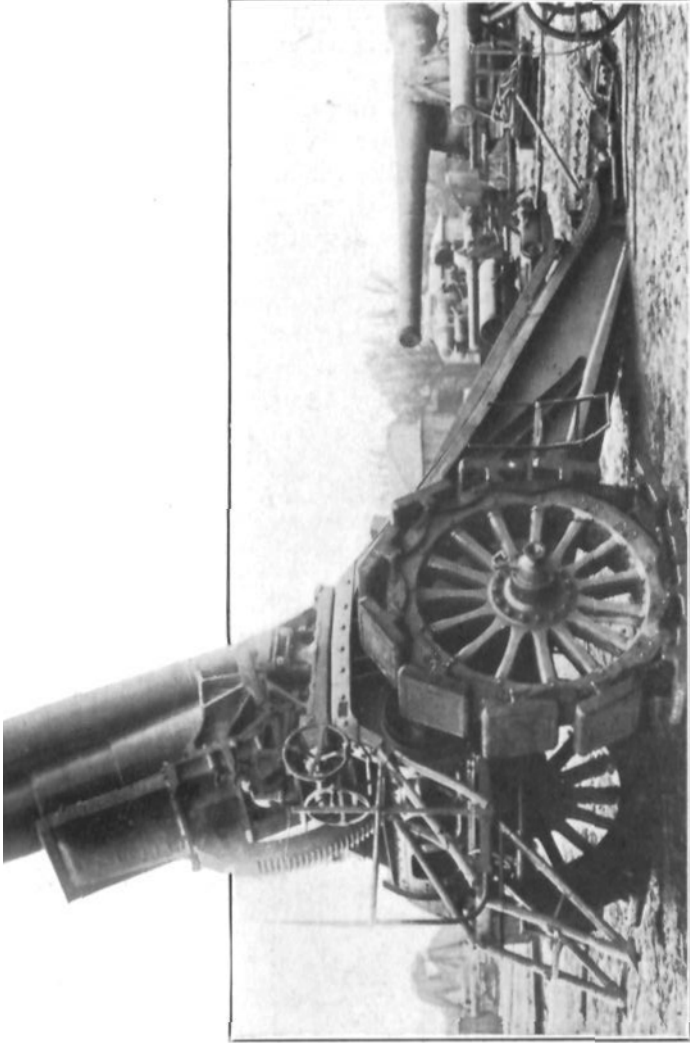
Some of the available information in regard to three European systems is tabulated below:

COMPARATIVE TABLE SHOWING THE CHARACTERISTICS OF THE THREE TYPES OF SIEGE HOWITZERS AND MORTARS.

	Schneider Mortar.	Krupp Howitzer.	Ehrhardt Mortar.
Caliber, inches	11.023	11.023	11.023
Extreme Range, yards.....	11,045	11,045	10,827
Common shell, pounds	758 ¹	750 ¹	760.6 ¹
Weight of powder charge, pounds.....	10 to 30	16.53 to 23.14
Muzzle Velocity	853 f.s. ²	1115 f.s. ²	885 f.s. ²
Limit of Elevation.....	10° to 60°	0° to 65°	20° to 60°
Limit of Traverse	20°	10°	10°
Weight of Mortar, pounds	8692	13,514	8818.5
Weight of Mortar and Carriage complete, pounds.....	33,082	30,644	22,928
Number of Loads after dismounting for transportation	4	2	2
Weight of Loads, pounds.....	Gun-load 10,837	Gun-load 19,687	Gun-load 13,117.5
	Chassis-load 10,660	Carriage-load 17,990	Carriage-load 14,109.5
	Carriage-load 8,750
	Platform-load 11,220

¹ High explosive shells of less weight are also used.

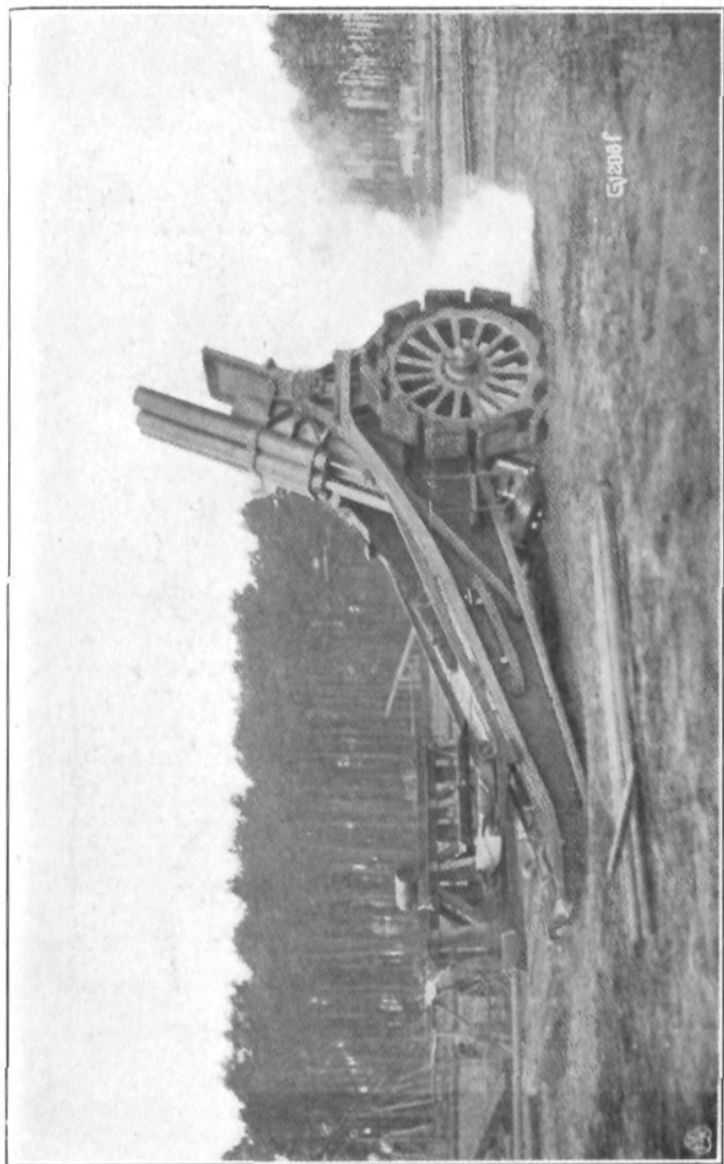
² Variable, according to weight of ammunition used.



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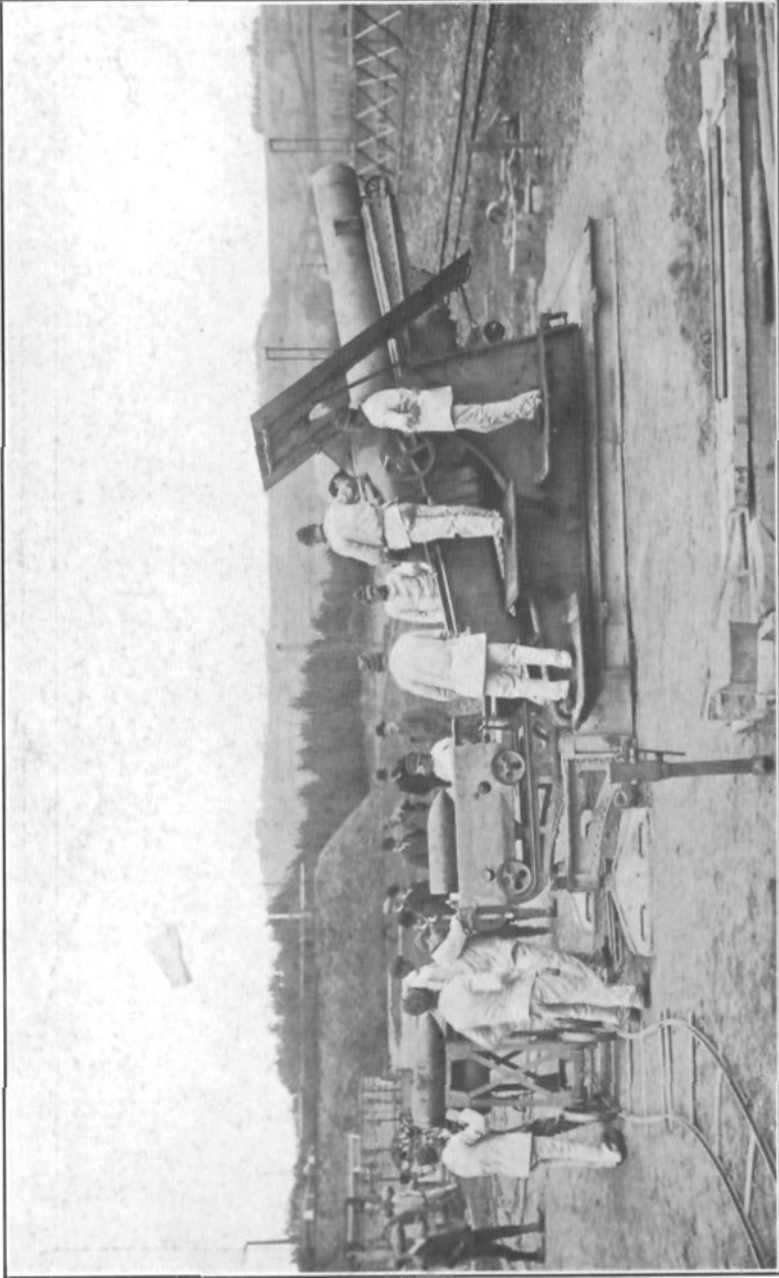
KRUPP SIEGE HOWITZER, 11.023 INCHES (28 CENTIMETERS).

This illustration has appeared in the public press with the title: "17-inch German Siege Gun." The 28-centimeter howitzer is the largest German siege howitzer of which there is any authentic record. This photograph appears in a

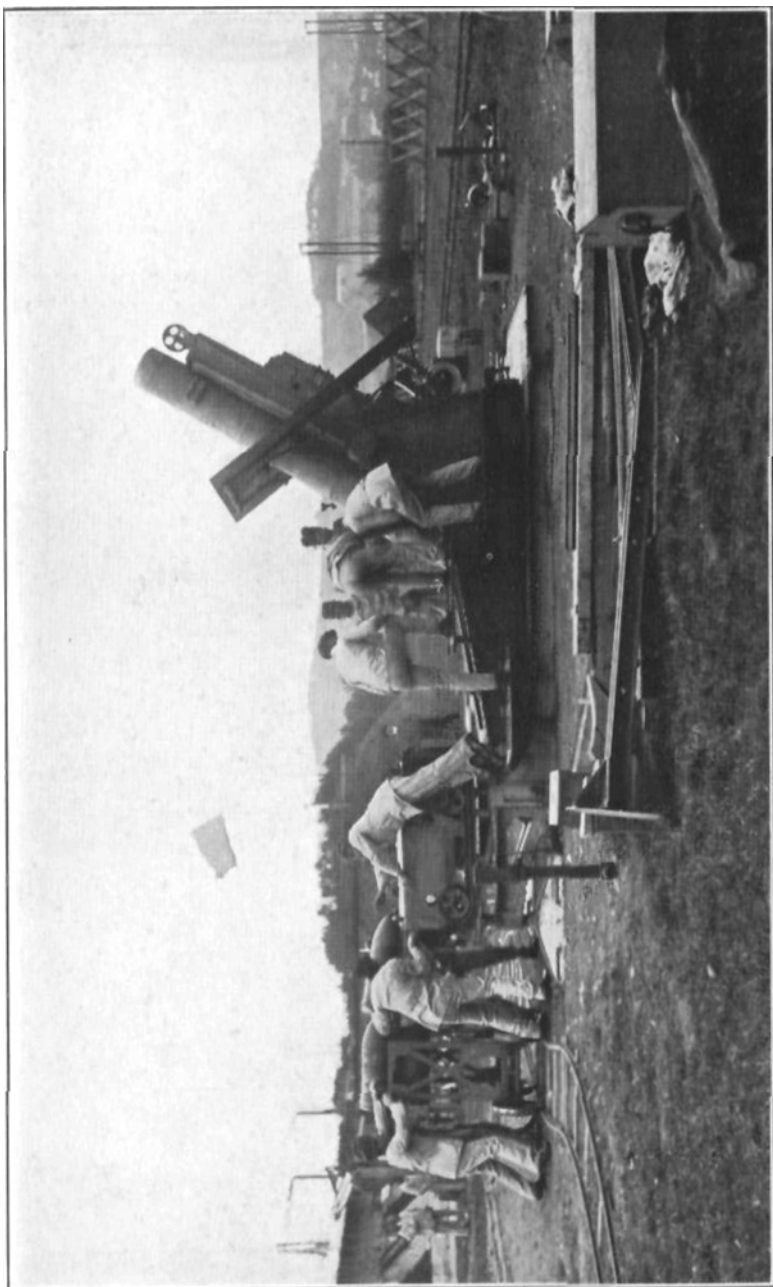


KRUPP SIEGE HOWITZER, 11.023 INCHES (28 CENTIMETERS).

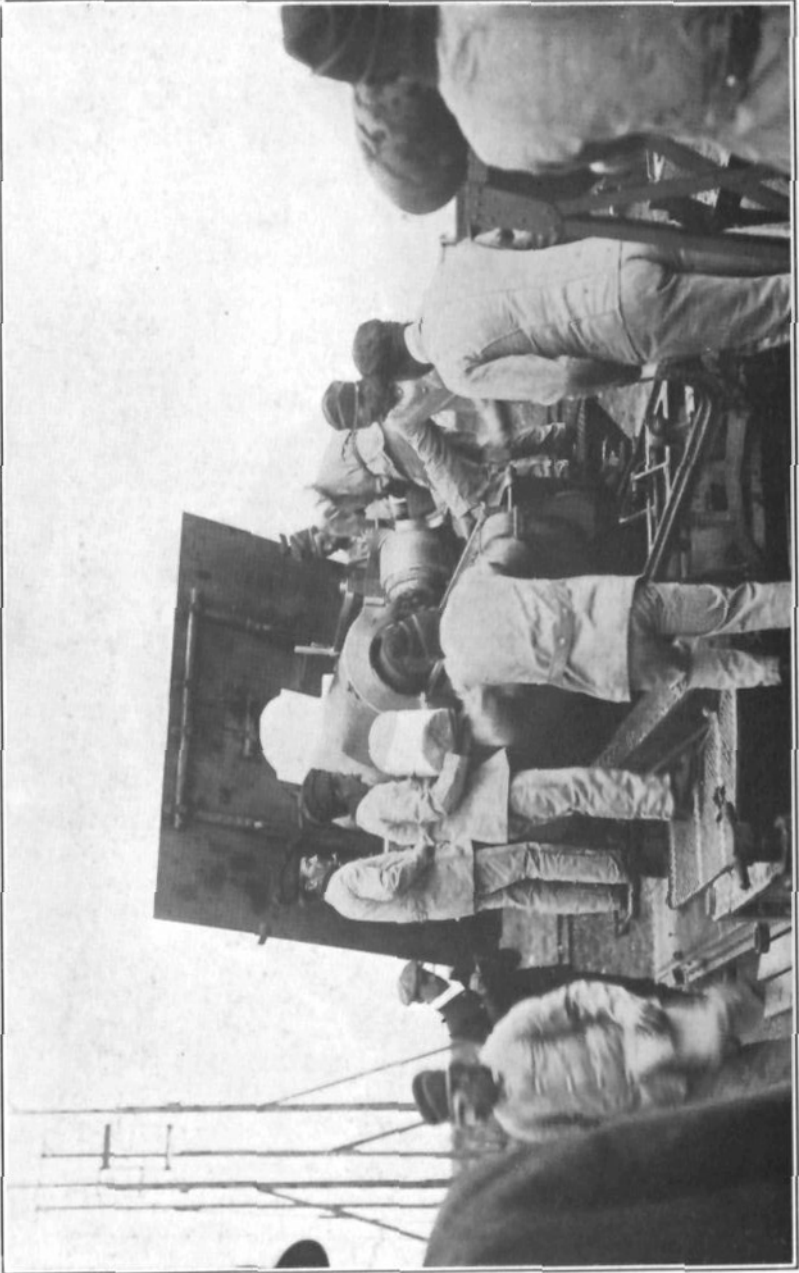
Taken at instant of firing, showing full recoil.



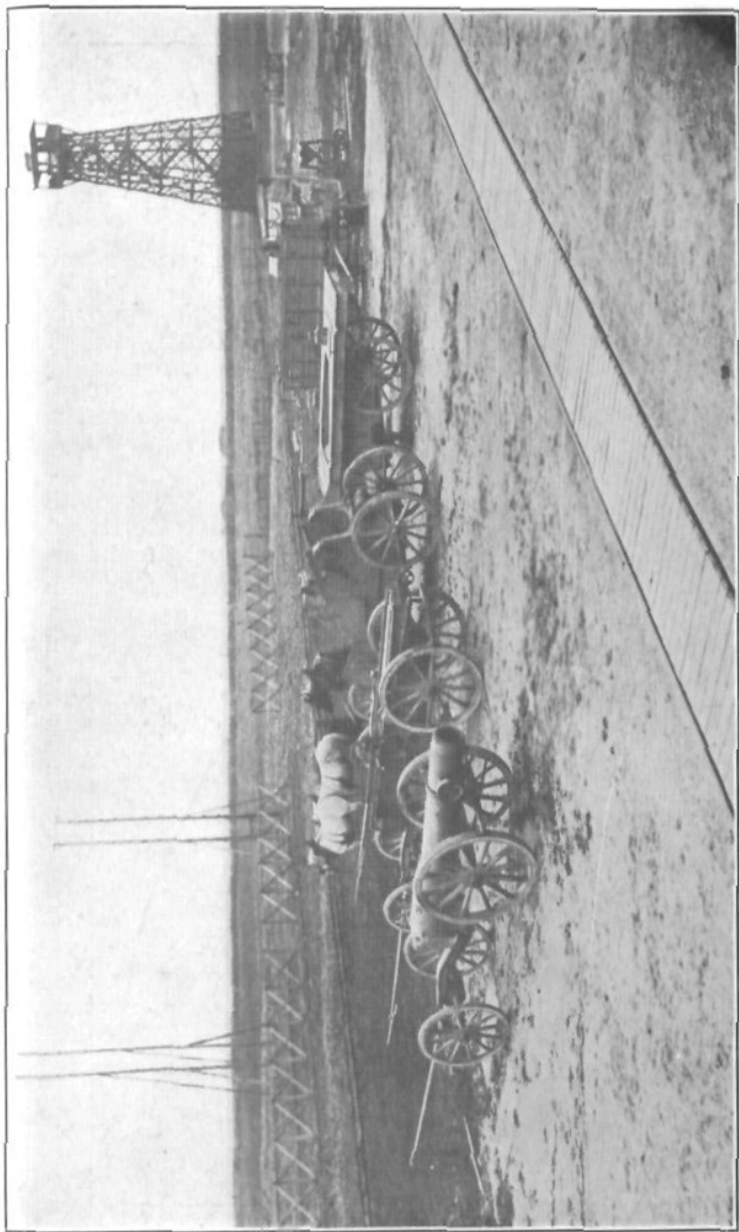
SCHNEIDER SIEGE MORTAR. 11.023 INCHES (28 CENTIMETERS).



SCHNEIDER SIEGE MORTAR.

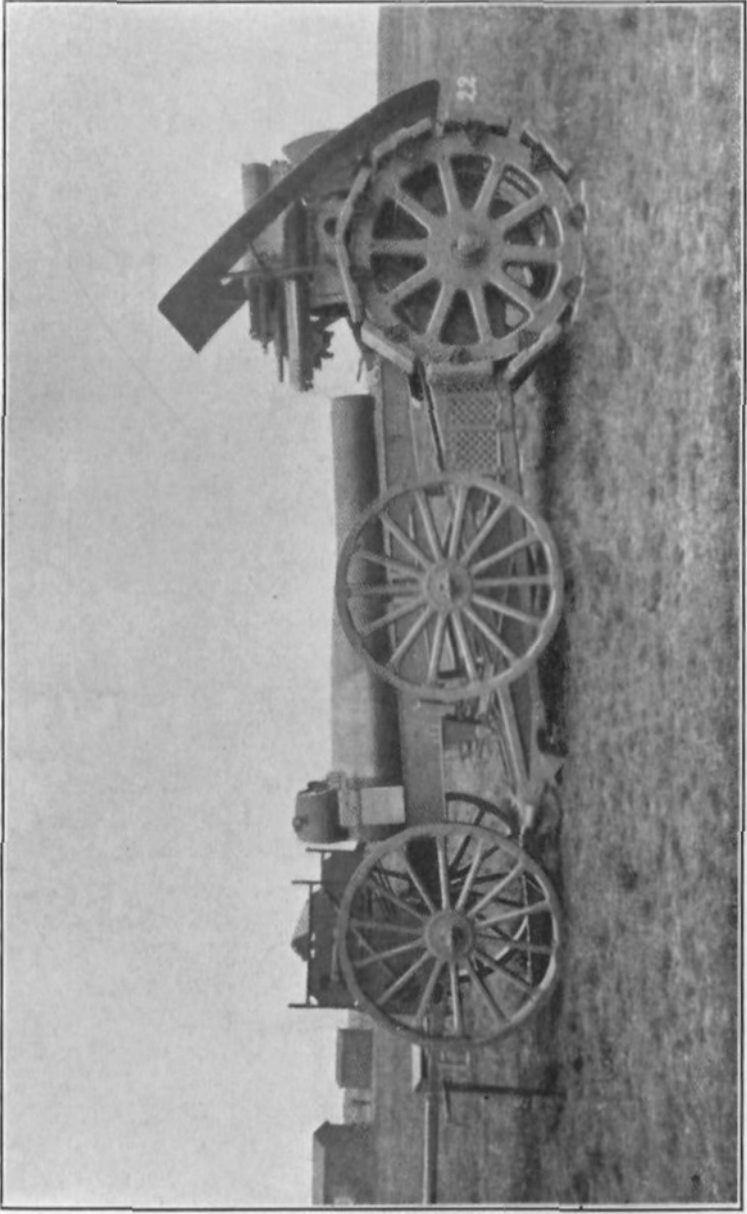


SCHNEIDER SIEGE MORTAR, SHOWING OPERATION OF LOADING.



SCHNEIDER SIEGE MORTAR.

Disassembled and prepared for road transportation in four loads. Time required to mount or dismount: 56 minutes.



EHRHARDT SIEGE MORTAR, 11.023 INCHES (28 CENTIMETERS).

Showing method of disassembling mortar from carriage and placing it on wagon for transportation.