

THE
STORY OF THE GUNS.

BY

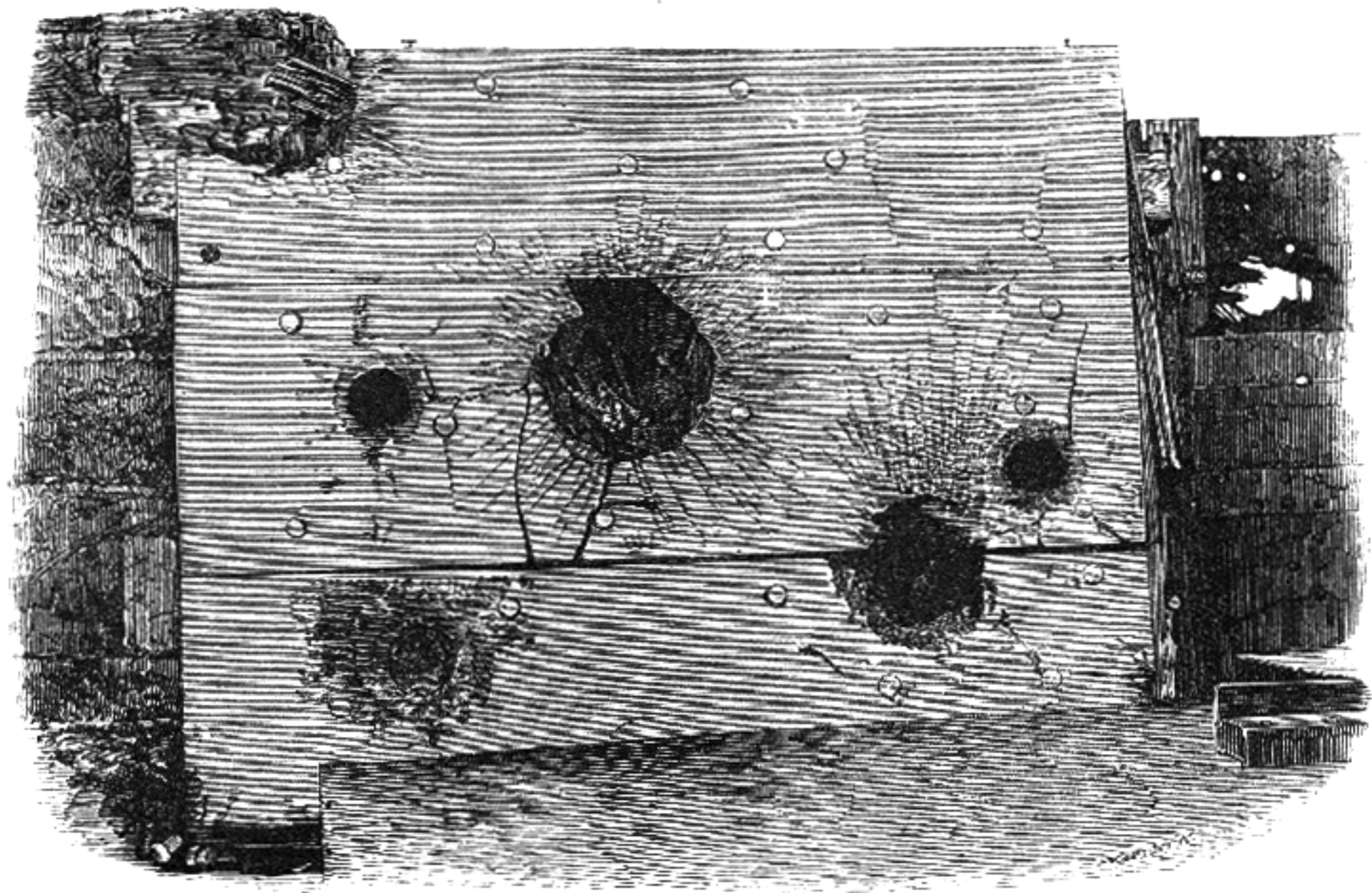
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IRON TARGET DESTROYED BY THE WHITWORTH AND HORSFALL GUNS.

PREFACE.

IT was my fortune at an early age to hold a commission as an officer of artillery in a foreign service, during a time of war. It was in the 'pre-scientific period,' and under circumstances which, however advantageous for observing the destructive powers of ordnance both by land and sea, were little favourable to the study of its construction. But they imparted an interest in the subject which recent occurrences have served to revive.

In the great controversy, which for the last few years has attracted attention to the guns of rival inventors in this country, I have no pretension to interfere either as a military commentator or an amateur theorist. But in addition to the inventors who are to produce the new artillery, and the naval and military service who are to use it, there is a *third party* interested in the investigation;—the nation at large, who look to acquire an effective armament in return for the expenditure incurred. As one of the latter I enquired without success for any published state-

ment, calculated to give in the order of time and occurrence a consecutive memoir of what has taken place since the war in the Crimea, in connection with the improvement of rifled arms. Finding that none such existed, I have compiled the present volume, in the hope to supply the want, so far as concerns the progress made in England — what has been done elsewhere is beyond the scope of my undertaking.

In addition to personal observation of the results of experiments with artillery, my information has been drawn from such records as are accessible to the public: papers laid before Parliament, evidence taken by successive Committees of the House of Commons, discussions in the theatres of scientific institutions, addresses delivered to large assemblies on special occasions, reviews and periodicals, reports of the press upon the marvellous powers of the new ordnance as displayed from time to time at various points of the coast, and the comments of writers devoted exclusively to mechanical science in its application to the art of war.

From these and similar sources it has been my aim to collect such materials as are calculated to disclose the former state of things that rendered the demand for improvement imperative, and to exhibit at each stage the advance made by successive inventors, all contributing to bring the question to that point in which it now awaits solution.

One series of topics I have scrupulously shunned,

beyond the merest mention (when such was unavoidable) that such points had been mooted; I mean the never-ending and apparently inscrutable claims of inventors to priority of discovery. I have found throughout the course of this enquiry, that with a curiously infelicitous uniformity, there is not a single feature in any one of the recently patented improvements in gunnery—from the metal of which a cannon is made to the form of the bore and the configuration of the projectile—that has not been the object of contested claims and the source of vituperative animosity. Were we to credit the open assaults and the secret imputations, not on one only, but apparently on almost all the eminent engineers at present engaged in the study of rifled arms, the otherwise inadmissible conclusion would be inevitable, that the most exalted men in this important department must be included in Pope's estimate of Bacon, as

The wisest, brightest, *meanest* of mankind.

I have passed by such discussions, not from any disrespect to the distinguished individuals whom they concern, but from a conviction that the conclusions, to whichever side they may lean, can have no practical weight as regards the momentous decision which the country is now called upon to make. Such claims honourably adjusted will form brilliant epochs in the biography of science, but as personal incidents or chronological disquisitions they cannot with propriety be

permitted to divert the attention of the nation from the paramount object of acquiring for the equipment of its forces the arms most conducive to security in peace, and to supremacy in war.

J. EMERSON TENNENT.

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