

the same time, and were free to proceed with them from that instant, it appears that in reality certain important drawings were not forthcoming for the English makers, and that, as regards such a presumably vital point as the breech mechanism, their hands were tied for nearly six months after the order was received.

A second essential difference in the conditions of contract will be found in the system of inspection pursued during manufacture. In England a certain number of artillery officers are specially detailed to superintend the manufacture of War Office material in private works. They reside on the spot, go day by day to the factory, and are allowed access at any time to any building where Government work is being carried on. The whole of the rough material is examined by them, and pieces cut off and subjected to certain mechanical tests defined in the contract. If the material fail at test, even by the smallest amount, it is rejected, and new must be obtained, with a corresponding delay. If the material pass the test, the inspector punches his mark of approval upon it; and until this mark is applied no work can be done on any given piece. Should processes of manufacture, such as turning or planing, threaten afterwards to remove this mark, the inspector must be awaited, so that he may transfer it to another part of the article, where it will not be interfered with. During the actual building up, other tests are required; until at last the gun or carriage is sent to Woolwich to pass its final examination. Here, if any discrepancy with the standard pattern is detected, the article stands rejected until such discrepancy has been adjusted. We have been at some pains to obtain opinions of the delay caused by these most useful precautions, and estimates agree very closely in considering that some 40 per cent. to 50 per cent. is thus added to the time required for completion. Manufacturers have tried, time out of mind, to shake off these fetters, characterising inspection as arbitrary, pedantic or antiquated, with many other adjectives which none know better how to use than the public-spirited gun-maker; but the common sense of the