

## 6. JAMES'S FORT, STIRLING

ALTHOUGH the strategical importance of Stirling Castle in medieval times was due primarily to the fact that it guarded a vital crossing-place of the River Forth, little could be done at that period to integrate the defences of the Castle with those of Stirling Bridge, which lay some 900 yds. to the NE. With the advent and steadily increasing efficiency of artillery, however, steps were taken to remedy this defect, and there is some evidence to suggest that by the middle of the sixteenth century the Castle was provided with an artillery battery specifically designed to command the Bridge.<sup>1</sup> During the next century and a half the Castle defences were improved and remodelled on more than one occasion, but most of the work of this period was swept away in 1708-14 to make way for the much more elaborate system of outer defence-works that is seen today. This paper draws attention to an abortive, late seventeenth-century project for strengthening the defences of the Forth crossing, not by means of direct improvements to the Castle batteries, but by the erection of a separate artillery fort on the N. bank of the river.

On 2nd October 1684 a warrant was issued to Lord Dartmouth, 1st Baron Dartmouth and Master General of the Ordnance, directing him forthwith to send one of his principal engineers 'to the city and castle of Stirling with instructions to take an account of the situation thereof with the passes on the River Forth and to make and draw the best designs he can for fortifying the same either separately or together, causing likewise particular estimates of the charge of the works and fortifications intended and exact drafts of the designs to be made and drawn and presented for the King's view and approbation'.<sup>2</sup> The Board of Ordnance Minute-Books indicate that the officer selected for this mission was Major Martin Beckman, and show that he had completed his journey by 24th November 1684.<sup>3</sup>

Beckman, originally a Swedish captain of artillery, had been employed as an engineer by Charles II as early as 1660, and had drawn up plans for fortifications at Tangiers two years later. Appointed an engineer to the Ordnance office in 1670, he had achieved some recognition the following year by personally assisting in the capture of Colonel Blood as he was attempting to rob the jewel-house of the Tower of London. Thereafter Beckman's promotion was rapid, and he became second engineer of Great Britain in 1681 and chief engineer four years later; he was knighted in 1686.<sup>4</sup>

No more is heard of the proposed fortifications at Stirling for some time after Beckman's visit, but in May 1685, three months after the death of Charles II, his successor dispatched to the Duke of Queensberry, Lord High Commissioner to Parliament, a letter ordering a new company of foot to be raised by Captain George Barclay 'to be settled as a constant garrison in the fort (to be called James's Fort) which we are resolved forthwith to cause to be built near the Bridge of Stirling'<sup>5</sup>; a fortnight earlier Barclay had been appointed first Governor of the new fort.<sup>6</sup> The immediate occasion for this renewal of activity was probably the threatened rebellion by the Earl of Argyll, and the fact that the rebels were so easily overwhelmed by the royal forces in June may partly explain the final abandonment of the Stirling project. None of Beckman's estimates for the proposed fortifications

<sup>1</sup> Royal Commission on Ancient Monuments (Scotland), *Inventory of Stirlingshire*, I, 184, 191.

<sup>2</sup> *Calendar of State Papers, Domestic Series, May 1, 1684 - February 5, 1685*, 164.

<sup>3</sup> Public Record Office, W.O. 47/14, 24, 31, 63, 72.

<sup>4</sup> *Dictionary of National Biography, Supplement*, I, 160 ff.

<sup>5</sup> *Register of the Privy Council of Scotland*, 3rd Series, XI (1685-6), 64.

<sup>6</sup> *Register of the Great Seal, Paper Register*, XII (1685-8), No. 93. We owe this reference to Dr A. L. Murray.

have so far come to light, and for about a year after his return from Scotland he appears to have been more or less constantly employed in the direction of works at Hull and at Landguard Fort.<sup>1</sup> No record of payments for works at Stirling Bridge has in fact been found either in the records of the Board of Ordnance or in the Scottish Treasury Register, and it would seem certain that the designs that Beckman had been commissioned to produce after his visit to Stirling never got beyond the drawing-board.

Beckman's design for the fort is preserved in two drawings,<sup>2</sup> one of which (Pl. LXI) is signed 'M. Beckman / 1685'. The drawings, from the collection of the 1st Baron Dartmouth, were purchased at Sotheby's by the Ministry of Works in 1948. The unsigned plan has since been deposited by the Ministry in the Public Record Office; the signed plan is at the time of writing still held by the Ministry of Public Building and Works. In all details of the design the plans are identical; the signed plan names, and misspells, the River Forth, and has a N. point.

The proposed fort rests on the left bank of the Forth, and lies within one of the great meanders of the river. The main work consists of a central bastion flanked by demi-bastions. Before it is a broad ditch with two ravelins; a covered way with places of arms in its re-entrant angles; and a glacis with a small wet ditch beyond it. The flanks of the bastions are perpendicular to the line of defence, giving a flanking distance (the measurement from the bastion flank to the point of the enfiladed bastion) of about 450 ft. The rear of the main work is closed by a stone wall with regular salients towards the river.<sup>3</sup> No traverses are shown in the covered way and the places of arms are not retrenched. It is not apparent whether the scarps and counterscarps are to be of earthwork or revetted in stone. Stirling Bridge crosses the Forth to an irregular detached work in the main ditch beyond the face of the W. demibastion. The bridge from the detached work leading to the field is defended by a palisade.

The two curtains of the bastioned work meet at an angle of 108°, which is the interior angle of a regular pentagon. The bastioned pentagon is the commonest perfect form found in regular fortification from the late sixteenth to the early eighteenth century, both in practice and in text-book illustrations. The design for James's Fort is clearly taken from a highly conventional pentagonal plan, truncated to fit the riverside site but otherwise only adapted to it by the design of the bridgehead work noted above, and the trace of the covered way on the east. Such a scheme would take very little time or study to prepare; it will be observed that no consideration has been given to the necessary arrangement of traverses at the ends of the ditches. Such a scheme would, however, be costly to execute, for including the outworks it occupies an area of about 20 acres.

By 1684 the pentagonal fort at Tilbury, designed by Sir Bernard de Gomme (whom Beckman succeeded as chief engineer in 1685), was virtually complete.<sup>4</sup> The angles and dimensions of the truncated bastioned polygon of James's Fort are almost identical with those of Tilbury, which has a flanking distance of about 475 ft. The outworks of James's Fort differ from those of Tilbury either as designed or executed, but are clearly cognate with them. The siting of Beckman's design is open to criticism. The proposed fort could only be defended in conjunction with Stirling Castle, though effective support from the

<sup>1</sup> Public Record Office, W.O. 47/15 and 47/16, *passim*.

<sup>2</sup> Ministry of Public Building and Works Library, Edinburgh (PP) CX2/257.19943 (2). Signed and dated plan. Public Record Office, Works 31/19. Unsigned plan.

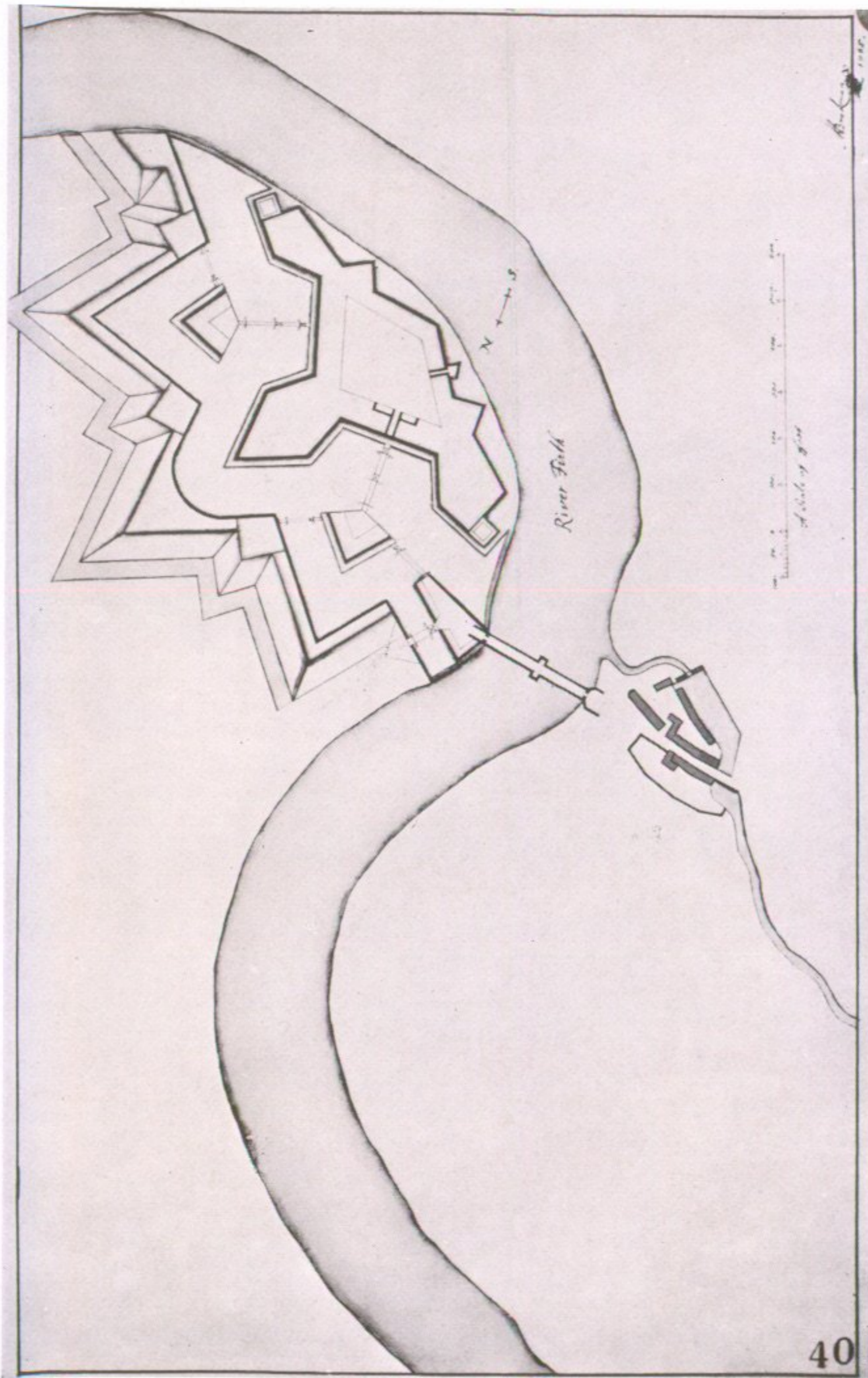
<sup>3</sup> Such a design for a waterside front is not uncommon, e.g. the abortive project for a complete replanning of Fort Augustus in 1746-7, B.M., King's Top. Coll. L. 12a.

<sup>4</sup> See Andrew D. Saunders, 'Tilbury fort and the development of artillery fortification in the Thames estuary', in *The Antiquaries' Journal*, XL (1960), 152-74.

Castle is hindered by the intervening Gowanhill. The eastern part of the proposed fort appears to be dangerously open to fire from the S.

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James's Fort, Stirling: signed and dated plan prepared by Major Martin Beckman, 1685