Richard Israel, *Cannon Played from the Great Fort: Sieges in the Severn Valley in the English Civil War*. Helion, Warwick, 2021. 165 pp, 30 b/w ill, 13 figs, 10 maps. Paperback £25.00. [ISBN: 978-1-913336-50-9].

The last decade has witnessed a remarkable resurgence of interest in and the study of the military of 17th century Europe. In Western Europe this history is dominated by the Thirty Years War, the British Civil Wars and the wars of the "Sun King" Louis XIV. This century witnessed not only the transformation of the battlefield but no less dramatically the development of military engineering, regarded as an "art " in the late 16th century and raised to a science by the end of the 17th. It was the siege rather than the set-piece battle which dominated 17th century warfare. During the British Civil Wars alone there were over 300 sieges of various kinds ranging from surprise attacks to complete circumvallation and prolonged sieges. Despite their importance, studies of sieges and fortifications are relatively uncommon and this well-crafted book by Dr. Richard Israel is a very useful addition. Drawing on his doctoral thesis he examines in considerable detail the sieges of the key towns and cities in the Severn valley, in and around the historic County of Gloucestershire. Adopting archaeological landscape techniques this work successfully combines recent archaeological work, geological and geographic data and topographical analysis with contemporary accounts to create a vivid narrative of these events. He discusses innovations in fortifications in Britain including the introduction of the Trace Italienne (a fort surrounded on the exterior with projecting angles) as well as the influence of contemporary manuals and commentaries such as Norwood's "Fortification or Military Architecture", Ward's "Animadversions of Warre", both printed in 1639 and Papillon's "A practicall abstract of the arts of fortification", published in 1645.

The introduction perhaps dwells a little too much on the legacy of classical siege techniques at the expense of the 16th and 17th century advances in siege craft. The Grand Siege of la Rochelle of 1627-8, where French engineers isolated the city with entrenchments 12 kilometres long, fortified by 11 forts and 18 redoubts is not referenced and the wider contemporary European context of the Thirty Years' War, including the siege of Leuven, 24th June to 4th July 1635, and the fifth siege of Breda, 21st July to 11th October 1637, where many of the commanders of the English Civil War "cut their teeth" is not examined. Most surprisingly, the wider English Civil War contexts such as the siege of York, June to July 1644 where counter-mining and flooding were employed to frustrate the Parliamentary besiegers, and the sieges of Oxford 1644/5/6 with the construction of a bridge of boats over the Cherwell and a circumvallation encompassing the great fort are not explored.

The main narrative is divided into 4 chapters and a conclusion, commencing in the late spring of 1643 with the sieges of Worcester, Bristol, and Gloucester. It then examines the sieges of Shrewsbury and Bristol in 1645, and finally those of Bridgnorth and Worcester the following year. This is followed by comparisons of the effectiveness of the Royalists' and the Parliamentarians' siege techniques. This linear chronological approach makes for easy reading.

It is generally accepted that the year 1643 marked the high tide of the Royalist war effort but its successes in that year are outweighed by its failures particularly the Royalist losses sustained at the storming of Bristol on 26th July and the failure to take Gloucester, which ultimately led to a costly stalemate at the first Battle of Newbury. The first chapter begins with the short siege of Worcester, 29th to 31st May 1643, conducted by a Parliamentary army of about 3,000 under the command of Sir William Waller which failed to capture the city and retreated to the Parliamentary stronghold of Gloucester. It then follows the course of the storming of Bristol, 23rd to 26th July, with its wealth of eye-witness accounts particularly that of Bernard de Gomme, a Dutch engineer on Prince Rupert's staff. It is though this lens that the author examines what is known of the state of the Parliamentarian defences. Inevitably, however, this chapter is dominated by the siege of Gloucester 10th August to 5th September 1643, because of its significance and subsequent consequences. Here a wealth of contemporary sources including the City Corporation's accounts supplement the

archaeological evidence. Dr. Israel makes an important observation on the low rate of artillery fire by the Royalists, but perhaps misses the opportunity to explain this in the light of the logistics of the trains of artillery and the difficulties of supply etc. Once again, the geography is examined in detail as is the waterlogging of the land around Gloucester and its impact on the Royalist siege operations. He also assesses the socio-economic impacts on the civilian population caused by the destruction of property to create unobstructed "fields of fire" and to deny the enemy cover, as well as the damage caused by the besiegers.

Re-fortified in 1642 for the Civil War, at considerable expense to a reluctant town, Shrewsbury Castle was further strengthened by Lord Capel in 1643 and by Prince Rupert in 1644. Nearby houses were pulled down, to give a clearer field of fire to the north and the town walls and gateways were strengthened and repaired. Near the castle itself additional wooden palisades were erected, and outer defensive ditches were dug. After all this, the castle withstood only a brief and inglorious siege. In February 1645, it was besieged by a Parliamentary force from Wem, which was able to enter the town itself, piercing the town walls via St. Mary's Water Gate. The town's fall left the castle in an isolated position, and it immediately surrendered, probably without firing a shot, on March 12th.

The second siege of Bristol, 23rd August to 10th September 1645, is dealt with in great detail and here the study is at its best linking the archaeological evidence for "Fort Royal" to Sir Bernard De Gomme's: "A declaration of His Highness Prince Rupert with a narrative of the state and condition of the City and Garrison of Bristol". De Gomme accompanied Prince Rupert to England after their service in the Thirty Years' War, and was knighted by Charles I. He served with conspicuous ability in the Royalist army as engineer and quartermaster-general from June 1642 to May 1646. While in Bristol, De Gomme oversaw the fortification and improvement of abandoned parliamentarian defences such as Windmill Fort which became Prince Rupert's headquarters. This included the Royal Fort which is described as a "practical solution for the elevated terrain." Again, Israel draws on contemporary written sources and the account book of the City's' Corporation to enhance his narrative. His analysis draws on the impact of the geology on the sieges emphasizing hardness of the high ground, as the fortifications of the Water Fort, Brandon Hill and the Royal Fort were all built on a quarzitic sandstone formation with loam clay of a silty consistency. Generally, the soil overburden was shallow and combined with light-to-heavy clay, which is difficult to excavate; he demonstrates the significance of obtaining the most advantageous siting of the fortifications and the effects this had both on the City's defences and on the siege works. He discusses the surviving remains of the Royal Fort, the most recent excavations conducted at the site and the evidence for later additions to the fort. He determines whether the fortification was in a suitable location within the landscape of the 1640s.

In 1646 Bridgnorth was held for the King, but on 31st March, Parliamentary forces forcibly entered St Leonard's Close. The Royalists retreated into the Castle, setting fire to some stables in Listley Street and St Leonard's Church was set alight by incendiary 'bombs' fired from the north-east tower of the Castle. This caused ammunition stored inside the church to explode and burning timbers were scattered all over the High Town starting the Great Fire, which subsequently destroyed most of the High Town. After three weeks of continued attack on the castle Colonel Lavington took charge of getting a team of the Parliamentary force to dig a 70-foot tunnel under Castle Hill. Knowing that the Royalists stored their gunpowder in St Mary's Church his aim was to blow up the church. The tunnel was not completed as the Royalists surrendered on Sunday 26th April 1646. Once again, the effects on the civilian population are emphasized.

The second and longest siege of Worcester 21st May to 23rd July 1646 took place when Parliamentary forces under the command of Thomas Rainsborough besieged the City, accepting the capitulation of

the Royalist defenders on 22nd July. The next day the Royalists formally surrendered possession of the City and the Parliamentarians entered Worcester 63 days after the siege began. The book makes good use of cartographic evidence and recent archaeological discoveries which have unearthed remains of earthworks from the 1646 siege of Worcester including part of a large angular bastion, constructed to protect St Martin's Gate, known as the St Martin's Sconce.

The penultimate chapter of the book "Royalist versus Parliamentary Sieges" is perhaps the most subjective, drawing the almost inevitable conclusion that the Parliamentarians were more successful at siege warfare.

Finally, Dr. Israel concludes that for both protagonists control of the cities and towns was vitally important for either side to effectively campaign to win the war. He asserts that the landscape defined the fortification of these places and that the design and construction of the defences were of secondary importance to having control of the high ground, as at Bristol where, such was the importance of high ground it created a defensive circuit too large to adequately defend. At Worcester and Gloucester, the destruction of the suburbs and property to create the necessary "fields of fire", aimed at denying the besiegers cover from which to assault the defences or emplace their artillery to batter them, had a devastating impact on the landscape and the livelihoods of the civilian population.

Overall, this is a very accessible book, well researched and written. It is profusely illustrated with maps, plans and unique black and white photographs taken by the author. It contains a comprehensive and very extensive bibliography, for those who want to dig deeper, and serves as an excellent introduction to the subject.

JOHN PADDOCK

Worcester