Excalibur, Durlindana and Joyeuse are the names of the mythological swords of King Arthur, Orlando Furioso and Charlemagne: swords that are co-protagonists in the heroic deeds of knights and paladins, as narrated by epic chivalric romance, the pages of which offer accounts of acts of honour, virtue, love and swashbuckling. Such swords were commissioned from specialist swordsmiths, and those belonging to the most important of figures were made to measure and duly customised, being the faithful companions of many a duel and battle.

But when the sword became unserviceable due to wear and tear, or undesirable according to the diktats of the latest fashion, its owner would often decide to replace the pommel (the decorated part of the hilt). At this point, other craftsmen came into play, ones who through skilful modification would revalorise the rejected component, offering it a second lease of life – often one far removed from that for which it had originally been intended.

More often than not, sword pommels would end up in the hands of scale-makers, who – by trimming off the bases or buttons, or adding iron rings and strips or little pieces of lead – managed to *adjust* the mass of the pommel so as to adapt it to the steelyard balance of which the pommel itself would thus become the 'poise' (i.e. the weight that ran along the notched beam).

This volume, published by Libra 93 for the Museum of Scales and Balances, has the merit of analysing, cataloguing and studying over 150 steelyard poises from four different Italian private collections, as well as a limited number from the Museum of Scales and Balances itself (datable from between the mid-twelfth and the mid-nineteenth century): around half these poises derive from the reuse of sword pommels and cannonballs.

Thirteen of these recycled poises are still mounted on their original steelyards: for each of these, practical weighing trials were carried out which in some cases made it possible to pinpoint a geographical attribution to the steelyard by calculating the nature of the measuring system of reference (they are in fact all instruments that predate the introduction of the metric system).

The information sheets on the steelyard poises created using sword pommels were compiled by Lawyer Paolo Pinti and Engineer Mario Troso: two respected scholars in the field of hoplology. Numerous correspondences to the pommels are proposed through images of whole swords, tracked down in museums, private collections and auction catalogues, and with the pictorial portrayals of swords of the same type, so as to better date the findings themselves. The corresponding images of a hoplological nature comprise some 350 out of a total of more than 1,100 images to be found in the volume.

The section on classic steelyard poises (i.e. not those derived from the reuse of a pre-existing artefact) is edited by Lia Apparuti, curator of the Museum of Scales and Balances, in which 60 European artefacts are examined, mainly items of Italian or French origin. Unlike the poises from sword pommels, which almost never feature verification marks, these ones are full of information concerning the metrology in use at the time, testifying to the different forms of periodical verification applied in various countries at various times (letters, numbers, symbols, coats of arms etc.). Also in this section, whenever possible, visual correspondences are given with comparable portrayals of poises, including ones from paintings largely unknown to the public at large, showing scenes of weighing with steelyard balances bearing poises of the same typology. This set of pictorial works makes up a corpus of paintings on the theme that represents a unique body of images in the panorama of volumes dedicated to steelyards, and highlights just how much the study of weighing instruments shown in the paintings (a practice not often adopted by art historians) may even contribute to the dating of the paintings themselves.

Another virtue of this publication is in fact that it aims to go beyond individual specialisations (both hoplological and metrological) and instead create a network of meeting points with other disciplines that make it possible to analyse findings from various areas, in the belief that placing them in a wider context provides scope for a more realistic, complete and less self-referential overview.

There are also sheets relating to pommels, poises and weights of a particular shape: the octahedral cube, of which the origin is analysed and findings are presented not only on other

pommels, poises and weights but also on artefacts of various uses and origins (being a form also widely used in Islamic culture).

Finally, a number of poises are presented from the reuse of cannonballs (eleven, split up on the basis of how they were caged to be attached to the steelyard), of a woodcutter's wedge, a candelabra bowl and a firecracker cannon, which testify to the great attention paid to the reuse of materials that characterized pre-industrial society.

Given the importance of the theme of reuse, one of the four essays that open the publication is also dedicated to it, penned by Professor Mario Marchi and Paolo Pinti, while the remaining three (written respectively by Lia Apparuti, Mario Marchi and Achille Lodovisi) deal with the etymological aspect of the word *romano* ('poise'), based on the study of numerous legislative texts, technical dictionaries and monographic manuals on metrology; the next analyses the importance and the typological evolution of steelyard poises, while the last one deals with the aspects of the symbolism found on many of the poises studied here (the snake, the eight-petalled rose, the tree of life, the cross, the Christological IHS symbol, the hexagon, the sun and moon side by side). An extensive bibliography, divided into the two macro-areas – pommels and poises – features 285 titles.

But the volume does not end here, as there are also two major appendices (146 pages in total) dedicated to firecracker cannons and gunners' stilettos, also known as *centoventi*. Both of these appendices are a sort of all-inclusive work on the subject, the author having collected the results of monographic studies on these artefacts, reporting on the various theories as well as verified and published findings – along with some unpublished ones – providing a starting point for those who wish to make further reflections on these intriguing objects.

*Swords and Steelyards* therefore comes across as a completely original study, wide-ranging but also in-depth, of interest to historical metrology enthusiasts but also to hoplologists, with a broad yet precise and detailed vision, intended not only for readers of Italian thanks to the complete translation into English of the essays, as well as English summaries of the contents found in the information sheets and appendices.

The information sheets, featuring major photographic support, contain detailed descriptions and technical data, and where there are punch marks on the poises showing figurative motifs, they are reproduced as line drawings that afford a better reading of the details than the photographs alone.

*Swords and Steelyards* aims to become a reference manual, a useful tool for those who are interested in the topics it addresses and who wish to investigate, interpret and deepen their appreciation of these artefacts: ones considered a minor art, yet which are among the most vivid and realistic reflections of life in centuries gone by.