Recently identified at Burton Constable Hall

The collection of William Dugood FRS—jeweller, scientist, freemason and spy

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The collection of the jeweller William Dugood (fl.1715–67) was purchased by William Constable in 1760 and survives at Burton Constable Hall. It includes geological specimens, manuscripts and thousands of casts taken from medals, ancient coins and engraved gems. This paper presents an account of the enigmatic William Dugood and considers the significance of his collection of casts, most of which he took from the Farnese numismatic and glyptic collections when employed as jeweller to the Duke of Parma in 1732–3.

ON 27 May 1760, Captain William Coombes sailed the Sally up the Thames estuary past Gravesend on the final part of a voyage from Lisbon to London.¹ Among the ship's cargo was a consignment of three cases marked 'WC 1-3' containing 'curiosities', destined for William Constable (1721-91) of Burton Constable Hall in Yorkshire.² Constable had purchased the curiosities for $f_{.145}$ 10s. from Dr Gerard Barnard (d. 1783), president of the English College in Lisbon,³ acting on behalf of William Dugood (fl. 1715– 67), a Scottish jeweller who had taken up residence in Portugal in 1734.4 The larger part of this consignment survives at Burton Constable Hall and includes two cabinets containing thousands of casts in sulphur, wax, plaster and lead-alloy taken from gems, coins and medals (mostly from the collections of the Farnese family, Dukes of Parma), two manuscripts and some geological specimens. New research drawing together fragmentary details has revealed the extraordinary significance of this collection and the complex web of intrigue surrounding its creator William Dugood (Dugud, Ducat, Duckett), who was described by the antiquary and gem collector Baron Philip von Stosch (1691-1757) as 'the most excellent jeweller in Europe'.5

Of obscure origin, William Dugood first surfaces in Italy in 1716–17, when he is recorded as supplying prints and other unspecified items to the young Thomas Coke of Holkham who was on his Grand Tour.⁶ There are further references to Dugood in association with Jacobites exiled in Italy at this time, one of whom, Francis Panton, persuaded John Erskine, 1st Duke of Mar, to recommend Dugood as jeweller to James Edward Stuart, the Pretender, who presided over the Stuart court in Rome under the protection of Pope Clement XI.⁷ As a result of this recommendation, on 2 August 1718 a warrant was issued appointing Dugood as jeweller to 'His Majesty'.8 Dugood was a recent Catholic convert and through this appointment he soon became a trusted servant, not only in his position as jeweller but also as a factotum, giving him detailed knowledge of all the secrets of the Pretender's inner circle. It was this that made Dugood so useful to Stosch, who was appointed by the British Government in 1721 to report to Lord Carteret, Secretary of State for the Southern Department in Whitehall, on the activities of the Pretender and his followers in Rome, who posed a real threat to the stability of the Hanoverian government and were involved in recurrent plots for its overthrow. Stosch was known by the code name 'John Walton' and submitted regular written reports, with the most sensitive information presented in numeric cipher; for although his reports were sent to England through diplomatic channels, there was a constant fear of interception by the Pretender's agents and sympathizers.9

As the inside man in the Pretender's court, Dugood was Stosch's primary source of information. However, it was Stosch himself who aroused the suspicion of one of the Pretender's close advisers, Colonel John Hay, who suspecting that Stosch might be a British Government agent, sought to entrap him.¹⁰ In order to divert attention away from themselves, Stosch and Dugood took pre-emptive action and hatched a complicated plot. This exploited existing divisions within the Jacobite court to cast suspicion upon Hay by suggesting that he had been communicating with the mysterious John Walton.11 Unfortunately, their strategy backfired, and it was with some dismay that Stosch reported to his spy masters in Whitehall that on 11 November 1722 Dugood had been arrested and thrown into the prison of the Inquisition, charged on the pretext of heretical speech.¹² As a result of Dugood's imprisonment by the Dominican monks of the Holy Office, Stosch had not only lost his most important source of intelligence but also feared that Dugood would be tortured and reveal details of the British spy network. Since Dugood knew all the details of his espionage activities, Stosch used every means at his disposal to secure Dugood's release and even requested the Pope to intercede. However, as Stosch maintained, the Inquisition was an 'inexorable tribunal' of which all Italians were afraid, for anyone enquiring after a prisoner risked being implicated in their crimes.¹³ Stosch sought the help of his friend, Cardinal Alessandro Albani (1692-1779), who used his influence with the Congregation of the Inquisition to have Dugood set free. In his efforts to get Dugood released. Stosch made no reference to his allegiance to the British Government, but rather argued his case on the grounds of religious tolerance, and thus for the time being successfully protected his clandestine identity as the spy John Walton.¹⁴ Nevertheless, the Jacobites became wary of Stosch from this point and neither did they forget Dugood's treachery, commencing a campaign of persecution that lasted for the next ten years.

In fear for his life, Dugood left Italy in 1723 and was hounded across Europe by Jacobite agents before he eventually arrived in London.¹⁵ Meanwhile, Stosch wrote to Lord Carteret, recommending Dugood as 'a virtuoso, the most excellent jeweller in Europe' and requested that he help him. He noted that, although in his profession Dugood was both an honest and very clever man, given his previous intimacy with the Jacobites, he remained politically suspect. Nevertheless, Stosch felt that since he had rescued Dugood from the clutches of the Inquisitors, Dugood was under an obligation to him and consequently might prove useful in providing intelligence about the Jacobites.¹⁶ Whether Dugood received assistance from Carteret in London is impossible to say, but he soon came to the attention of the Whig politician and notable connoisseur William Cavendish, 2nd Duke of Devonshire.¹⁷ The Duke commissioned Dugood to set a large lodestone weighing about 45 kg into an elaborate oversized ducal coronet, which was then mounted into an apparatus that demonstrated its magnetic capacity to lift heavy weights.¹⁸ This lodestone, which was displayed at the Royal Society, passed through the Cavendish family and was later presented to the Ashmolean Museum by the Duke's cousin Mary Cavendish, Countess of Westmorlandthus acquiring the title 'The Countess of Westmorland's Lodestone'.19

Dugood also encountered freemasonry in London, then largely a fraternal grouping comprising antiquaries, natural philosophers and freethinking noblemen assembling in coffee houses and taverns. Dugood's initiation took place on 15 March 1725 at the Goose and Gridiron alehouse in St Paul's churchyard, though he later joined the lodge that met in the Three Tuns tavern in Billingsgate.²⁰ Freemasonry was significant for Dugood's advancement, and his election as a Fellow of the Royal Society on 2 May 1728 was sponsored by three prominent Freemasons: the Secretary of the Royal Society and scientist Theophilus Desaguliers spoke on Dugood's behalf, seconded by the Astronomer Royal Edmund Halley and the antiquary Martin Folkes.²¹ It was also around this time that Dugood travelled to Lisbon and set up the first lodge of Freemasons in Portugal.22

Despite his earlier misfortunes there, by the end of 1731 Dugood had returned to Italy. His arrival did not go unnoticed and immediately aroused the suspicions of Francis Colman, British Resident at Florence, who wrote to the Duke of Newcastle:

One Duckett [Dugood] formerly a Jeweller of the Pretender's went from hence yesterday to Leghorn with Wright, & if the said Duckett is meddling in any thing with the Pretender's people Wright has promised me to inform of whatever notices he can gather.²³

Denys Wright was a former Jacobite who turned agent on behalf of the British.²⁴ Dugood, however, had good reason to stay well clear of the Jacobites and sought employment elsewhere. Early in 1732 he secured a commission from the Farnese family, travelling to Parma to 'esteem the Jewels of the Farnese's House'. Following the death of Antonio Francesco Farnese, 8th Duke of Parma in 1731, the Duchy of Parma passed through the female line to Don Carlos of the House of Bourbon.²⁵ It was apparently in connection with this change of ownership that Dugood, 'very skilful in diamonds', was originally employed to estimate the value of the Farnese jewels.²⁶ Once this work had been completed, however, he was appointed as jeweller to Don Carlos, who was in his minority at the time and known as the 'Infant Duke'.²⁷

It was then that Dugood set about making copies of the Farnese treasures. These included the collection of engraved gems that had been brought together in Parma during the seventeenth century, among which were gems collected by the Medici that came to the Farnese through the marriage of Ottavio Farnese to Margaret of Austria, widow of Alessandro de' Medici. There were also the gems and coins collected by Fulvio Orsini (1529–1600), antiquary and librarian to the Farnese family. Although, according to Constable, it was 'by a special favour of the [Dowager] Duchess of Parma' that Dugood made casts from Farnese coins, it is difficult to believe that Dugood actually had authorization to take casts from some of the Farnese's finest gems, such as the Farnese Cup and the six rock-crystal plaquettes carved by Giovanni Bernardi (1494–1543) that are set into the Farnese Casket.28 Dugood took an impression, probably in plaster, from the relief carved on the inside of the agate cup in order to produce his large red sulphur cast. To copy Bernardi's plaquettes, it is likely that Dugood would have had to prize each of them from the casket. However, by far the most ambitious aspect of Dugood's enterprise was taking casts of thousands of Greek and Roman coins in the collection that had been built up by the Farnese family since the sixteenth century. All of this must have taken some considerable time and it is possible that Dugood never quite completed his task, for his service as jeweller to the Infant Duke 'with a good provision' was abruptly curtailed. The Jacobites had not forgotten their vendetta against him and put pressure on the Farnese to terminate his employment.²⁹

Nevertheless, Dugood was highly regarded by his employers and was generously rewarded for the service he had rendered them in estimating the value of their jewels.³⁰ Despite being discharged from their service, Dugood left Parma in July 1733 armed with two glowing letters of recommendation: one from the Dowager Duchess of Parma, addressed to the Pretendress, and another from the Dowager's Secretary of State, addressed to the Farnese minister in Rome.³¹ Dugood made his way to Florence, from where the British Resident, Brinley Skinner, reported:

about a month or six weeks past, there has been between this place and Leghorne one William Duckett a Roman Catholic Scotch jeweller trafficking in diamonds, cameo's and any kind of knickknacks which fell in his way, he has been an old stager in Italy ...³²

Dugood's 'trafficking' included showing a 'fine cameo' to the bedridden Gian Gastone de' Medici, Grand Duke of Tuscany, which 'occasioned a talk of him at Court' and brought him to the attention of Thomas Tyrell, 'a Gentleman of the Great Duke's bed chamber' and an infamous Jacobite agent.³³ As a consequence, at two o'clock in the morning of the 15 September 1733, Dugood was pulled from his bed in Florence, 'tyed with Ropes Like a Criminal & dragged to a horrid & Vile Dungeon'.³⁴ Tyrrell had engineered the arrest of Dugood with a trumped-up charge of stealing a diamond button from the Infant Duke of Parma.³⁵ Stosch, who had been forced to flee Rome in 1731 when Jacobite hostility fuelled by suspicion of his espionage activities made life too uncomfortable for him, was living in Florence and was alerted to Dugood's plight. On 23 September, Dugood was set free, following intervention from Skinner, who had worked hard on his behalf to undo Tyrell's devious plot. Stosch concluded that it was principally Dugood's friendship with him that attracted so much hatred from the followers of the Pretender, although their joint espionage activities had made them both targets of Jacobite agents. Stosch complained in his report to Whitehall that Tyrell's stated intention was to dispose of Dugood at any price, and that he had boasted openly that he would force Stosch out of Florence just as he had already forced him to flee from Rome.36

Besides their common foe, Stosch and Dugood had much to cement their friendship. Both were fascinated by engraved gems—Stosch's intellectual knowledge was a counterpart to Dugood's technical skill—and both were active Freemasons.³⁷ Stosch was associated with the setting up of the Florentine Lodge in 1732, and it seems reasonable to assume that Dugood also had some involvement following his arrival in Florence. As well as Stosch, other members included Dugood's friend from the Royal Society, Martin Folkes, and the Italian physician and antiquary Antonio Cocchi (1695–1758). Among Dugood's surviving collection at Burton Constable is a manuscript set of notes relating to the collecting of Roman coins, prepared by the antiquary and steward of the Medici gallery Sebastiano Bianchi (1662–1738) for Cocchi and his friend Theophilus Hastings, 9th Earl of Huntingdon (1696–1746).³⁸ And it was with another member of the Florentine Lodge, Sir Hugh Smithson, that Dugood travelled to Rome in November 1733.³⁹

Dugood's journey to Rome was taken against the advice of his friends; he evidently hoped that the letters of recommendation he carried would serve to ingratiate him with the Pretendress and thus guarantee his safety. However, having underestimated the machinations of the Jacobites, on entering Rome the overly optimistic Dugood was arrested on the orders of the Governor of Rome at the instigation of the Pretender. On this occasion, it was more difficult for the British government and its supporters to secure Dugood's release, Stosch reporting that the intercessions of Cardinal Albani and others had been useless. By this time Dugood was little more than a pawn in the quarrel between the Jacobites and the Albani faction, which openly protected Dugood as a snub to the excessive influence of the Pretender and his ministers.⁴⁰ When eventually released, Dugood persuaded Skinner to find him and his family a means of escape from Italy, and a passage was secured on the British warship Dolphin bound for Lisbon. Skinner's plan was that Dugood would then make his way to England, where:

... there might be gathered some useful knowledge from him relating to the Jacobites and their affairs abroad, and particularly of persons in England, and Scotland most attached to the Pretender, and was a chief motive with me in getting him a passage homeward, for his ill usage has made him so inveterate that I believe by way of revenge he would gladly do the Government all the Good Services that were in his power against his interests ... ⁴¹

Nevertheless, once Dugood had arrived in Lisbon with his wife and sons, he decided to remain. He returned to his long-standing interest in magnetism and carried out a series of magnetic observations along the coast of Portugal, later writing a learned dissertation concerning lodestones.⁴² Dugood was commissioned by King John V to set a powerful lodestone, reputedly a gift from a Chinese emperor, into a gilt metal crown, utilizing a similar suspension system to that which he had employed for the Duke of Devonshire's lodestone.⁴³ He seems to have prospered in Portugal, for besides employment by the King, he had the support of influential friends and acquired a reputation as a respected scientist.⁴⁴

It was apparently in 1759 that Dugood first came to the attention of William Constable. Constable had inherited Burton Constable Hall in 1747, and throughout the following two decades, he built up impressive collections of fossils and minerals, shells, scientific instruments and other curiosities for his private museum.⁴⁵ He habitually wrote copious notes for his own purpose and in a memorandum dated 1759 listed Dugood's collections of sulphur casts of coins and gems, lead-alloy medal moulds, mineral specimens and other curiosities, which were at that time available for sale. He writes:

1759 In Lisbon resides a very ingenious but illiterate Man calld Du Good, who is possesed of the following Curiosities. 1. A collection of medals of the Citys and provinces of Greece Copied in Sulphur from Silver. 2. Another Collection of Greek medals from Gold in Sulphur. 3. A Collection of Consular medals from Silver in Sulphur. 4. A Collection of Latin medals from Gold in Sulphur. 5. A Collection of medaglioni from Silver of all the Barbarian Kings from Philip & Amyntas down to Ptolemy the 5th of Egypt in Sulphur; all the above Collection he was permitted to take off in Sulphur by a special favour of the Duchess of Parma. 6. A Great number of impressions in Wax from Engraved stones, of Cameios in Sulphur, and of others, Cut in the most rare and precious stones of Antiquity. 7. A Collection of Leaden medals in hollow to take impressions with of the actions of Lewis 14th of France. All these with several other Curiosities are ranged in Exact order in two Cabinets. 8. A Collection of all kinds of minerals & c. g. The Heads of Homer, Solon, Socrates, Cicero, Julius Caesar in a composition as hard as stone. This Collection is Esteemed Curious & valuable the price, 100 moidore Cabinets & all.

[marginalia] Du Good was Goldsmith and jeweller to the King of Naples and several other princes and is now in the service of the King of Portugal. Several things are omitted for brevity's sake. This is the whole Farnesian collection as perfect as on the medals themselves.⁴⁶

Constable's memo was probably compiled, if not copied directly, from information passed on to him from Dr Barnard in Lisbon. Despite the rather disparaging description of Dugood as a 'very ingenious but illiterate Man', Constable took the decision to purchase the collection and his accounts record that on 2 February 1760 the sum of $f_{5}145$ 10s. was remitted to

Dr Barnard. Four months later, on 13 June a further payment of £8 4s. 6d. was made for freight and customs charges on the three cases which by then had arrived in London.⁴⁷

Most of Dugood's collection is contained in a pair of bespoke nesting oak cabinets veneered with walnut, which have numerous sliding trays designed to hold coin casts, gem casts and medal moulds (Fig. 1).⁴⁸ The 'several other Curiosities' and the 'Heads ... in a composition as hard as stone' do not survive and the 'Collection of all kinds of minerals & c.' has been subsumed into William Constable's extensive geology collection. Nevertheless, some fifty mineral specimens of mostly copper, iron and lead ores can still be identified as they have been re-labelled by Constable with the notation 'Lisbon Collection'. One such specimen bears the label 'Rich allum from Rome', thus providing evi-



Fig. 1. Pair of Italian walnut-veneered oak cabinets that hold William Dugood's collection at Burton Constable. The lower cabinet contains the casts of the Farnese Greek and Roman coins.

dence that Dugood was collecting rock and mineral specimens while in Italy. Constable purchased a further small consignment of geology from Barnard the following year, comprising a series of polished slabs from various quarries in the vicinity of Lisbon.⁴⁹ Again Barnard was acting on behalf of Dugood, for several polished slabs survive and still bear the original labels written in Dugood's hand.⁵⁰

For many decades, the cabinets containing Dugood's collection were ignored as they stood in a backstairs passage. Then, in 1992 Burton Constable Hall was purchased and established as a countryhouse museum by the Burton Constable Foundation, following which the contents of the cabinets were carefully examined as part of the collections accessioning programme. Fortuitously, at this time William Constable's memo was discovered in the archives, providing crucial evidence about the contents of the cabinets and about Dugood as the maker of the casts.⁵¹ The cabinet designed for coin casts contains over 9,000 sulphur casts, representing the obverse and reverse faces of some 4,600 Greek and Roman coins, for which Dugood's detailed manuscript list survives in the Burton Constable library. The gem and medal cast cabinet, which sits above the coin cabinet, contains 772 red sealing-wax impressions of intaglio seals glued into four paper-lined trays-identifiable with 'a Great number of impressions in Wax from Engraved stones' noted in Constable's memo (Fig. 2). In addition, there are some 200 individual loose casts of engraved gems and Renaissance rock-crystal carvings, 513 lead-alloy moulds taken from medals and forty-eight sulphur casts of medals produced from these moulds.



Fig. 2. One of Dugood's trays of red sealing-wax impressions taken from intaglios (detail).

Casts of engraved gems

Constable's memo describing Dugood's collection states that only the casts of coins were made 'by a special favour of the Duchess of Parma'. Nevertheless, it is evident that most of the surviving loose gem casts were, like the casts of coins, copied from the Farnese collection. The 200 individual gem casts that survive at Burton Constable include several duplicates and are by no means a complete representation of the Farnese collection (for which to date nearly 500 gems have been identified).52 Yet, it seems likely that Dugood originally took more than 200 impressions and that there have been significant losses. Besides the loose casts, the sealing-wax impressions glued into travs also include a number taken from identifiable Farnese intaglios. These would have been quick and easy to make simply by pressing the engraved intaglio into hot sealing-wax.

The variety of materials used by Dugood demonstrates the experimental nature of his enterprise. Most of the loose casts are either in grey or red sulphur, several duplicated in both colours, and a number are damaged. Many of the casts also have blemishes caused by air bubbles in the sulphur, suggesting that either the manufacturing technique was not perfected or that they were made in haste. In addition, some of the red sulphur casts have been coated with a varnish (probably shellac) that has broken down over time and begun to peel away, thus further damaging the surface detail (Fig. 3).⁵³ Nevertheless, overall Dugood's casts display more sharply defined detail than subsequent



Fig. 3. *Bacchus on his Chariot*, red sulphur cast by Dugood. The varnish coating has deteriorated and begun to separate from the surface of the sulphur.

reproductions of the same gems made in sulphur by Christian Dehn (1699–1770) or in glass paste by James Tassie (1735–99).

It would appear that some of Dugood's casts or moulds were passed on to his friend Stosch, who amassed thousands of sulphur impressions throughout his life. In turn, Tassie acquired sulphurs from Stosch's collection and reproduced them among his series of glass paste cameos. These include Cleopatra (Fig. 4)⁵⁴ together with Bacchus supported by Silenus (Fig. 5), which Tassie reproduced in a simplified form, although still with the crack running across the top right-hand corner that is clearly evident in Dugood's original cast.55 Dugood's grey sulphur cast Aesculapius (Fig. 6) was taken from an intaglio in the Farnese collection, and an identical image appears in Tassie's collection, identified by Raspe as a sulphur belonging to Stosch.⁵⁶ Similarly, the casts of the cameos Artemis (Fig. 7), Chariot with Four Horses and *Dionysius* provide persuasive evidence that Dugood's moulds or casts were the original source for some of Tassie's impressions.57



Fig. 4. Cleopatra, grey sulphur cast by Dugood.



Fig. 5. Bacchus supported by Silenus, grey sulphur cast by Dugood.



Fig. 6. *Aesculapius*, grey sulphur cast taken by Dugood from a bloodstone intaglio in the Farnese collection.

Dugood must have manufactured many moulds as part of his scheme to copy gems although it cannot be determined what became of them. Although he evidently took his sealing-wax impressions directly from intaglios and could also have produced some sulphur casts in this way, for cameo originals he would have had to use a multi-stage process to produce a final cameo impression. The moulds would have been of special importance to a cast maker such as Christian



Fig. 7. *Artemis*, grey sulphur cast taken by Dugood from a sardonyx agate cameo in the Farnese collection.

Dehn, who began as Stosch's assistant and then went on to set up his own successful business in Rome producing sets of gem casts for grand tourists. Dehn's bespoke sets of some 2,000 impressions typically include over sixty taken from Farnese gems, notable among which are plaster casts of four of the six rockcrystal plaquettes engraved by Bernardi for the Farnese Casket. Unfortunately, Dugood's six plasters surviving at Burton Constable are dirty and in poor condition, for unlike the sulphur casts they have not survived centuries of damp conditions very well (Fig. 8).⁵⁸ Nevertheless, it is evident from the residual detail that survives on the surface of the plaster that they were originally good-quality copies. Given that Dugood is known to have taken casts from Bernardi's rock crystals in the casket, it might well have been his casts or moulds that were the source for subsequent reproductions by Dehn and possibly Tassie.

While most of Dugood's surviving casts represent Farnese gems on display in the National Archaeological Museum in Naples, several relate to less wellknown gems that survive in the museum store but are not included in the Farnese catalogue. These include



Fig. 8. *Naval Battle*, plaster cast taken by Dugood from an engraved rock crystal plaquette by Giovanni Bernardi.



Fig. 10. *Supplication of Dirce*, red sulphur cast taken by Dugood from a Farnese cameo. The cast includes a libation cup that has since disappeared from the gem in the National Archaeological Museum.



Fig. 9. *Alexander the Great*, grey sulphur cast taken by Dugood from a Farnese black paste relief now in the National Archaeological Museum.

the black paste relief *Alexander the Great* from which Dugood produced both a red and a grey sulphur cast (Fig. 9). Similarly, Dugood's casts of *Medusa*, *Athena*, a portrait bust of a woman, a portrait bust of a man, an eagle, a rabbit and a tiny murex shell were all taken from gems that survive in the stored collection of the National Archaeological Museum.⁵⁹



Fig. 11. *Curzio Ruffo*, red sulphur cast taken by Dugood that includes an elaborate frame, which has since been removed from the gem in the National Archaeological Museum.

A few of Dugood's casts at Burton Constable represent Farnese gems that have been altered in some way since his casts were taken, whether through accident or design. For example, the cast taken from the agate cameo *Supplication of Dirce* (Fig. 10) that echoes the *Farnese Bull* sculpture group includes a cup which has since disappeared.⁶⁰ Another example is the elaborate Renaissance frame surrounding *Curzio Rufo* (Fig. 11) that was present when Dugood made his cast but which subsequently has been removed.⁶¹ Some of Dugood's casts are from unknown or littleknown sources. For example, a circular convex sulphur cast with a low relief *Leda and the Sman* (Fig. 12) was taken from the base of a rock-crystal lamp bowl



Fig. 12. Leda and the Swan, convex grey sulphur cast 5.5 cm diameter taken by Dugood from the base of an engraved rock-crystal lamp bowl that is now in the Museum of Capodimonte.

that survives in the Capodimonte Museum in Naples.⁶² However, the source for the plaster plaquette *Hercules wrestling with Antaeus* (Fig. 13) has not yet been identified, although it was apparently taken from an engraved rock-crystal dating from the late sixteenth century.⁶³

The largest of Dugood's casts surviving at Burton Constable is the red sulphur impression taken from the inside of the Farnese Cup. Dugood evidently had to do a good deal of undercutting following the initial casting process in order to catch all the detail of the relief. Also surviving is Dugood's full-size papiermâché replica of the entire cup (including a hole drilled through the base), which is painted to represent the three-dimensional image including the mask of the Gorgon on the underside.⁶⁴

Casts of coins

The Farnese coin collection was brought together by a succession of scholars who worked for the Farnese household, most notably by Fulvio Orsini. Originally housed in the Palazzo Farnese in Rome, during the seventeenth century the collection was transferred to Parma. There the Jesuit Paulo Pedrusi (1644–1720)



Fig. 13. *Hercules wrestling with Antaeus*, low relief plaster cast taken by Dugood from an unidentified source.

began his task of publishing an illustrated catalogue of the Roman Imperial coins, the first volume of which, *I Cesari in oro*, appeared in 1694. Following Pedrusi's death in 1720, another Jesuit, Pietro Piovene, continued the project, and the tenth and final volume, dealing almost exclusively with the bronze medallions of Trajan (AD 53–117) was published in 1727.⁶⁵ The catalogue of Roman Imperial coins was thus never completed and there was no catalogue of Roman Republican or Greek coins. The Farnese collections were moved to Naples shortly after Dugood made his copies and were subsequently mixed-up with thousands of other ancient coins.⁶⁶

Dugood's bound manuscript list of his collection of coin casts survives at Burton Constable with William Constable's inscription on the inside of the front cover: 'Catalogue of Sulphur Medals in The two Wallnut Cabinets at Burton Constable'.⁶⁷ The headings in the manuscript are written in English and the lists are in Italian. The list commences with 'Greek Citys & Provences in Silver' (731 coins including 200 'without mark'), followed by 'Barbarian & strange Kings in Silver' (155 coins of Macedonian rulers), 'Greek Medallions in Gold' (39), 'Consular Medalls in Silver' (797 coins including 31 '*Incerte*'). 'Lattine Gold Medalls' (227), 'Roman Emp: in Silver' (710), 'Medalls in Brass' (172), 'Medalls in Large Brass' (833) and 'Meds. in Mid: & Small Brass' (996). The last four pages of this catalogue list some rare coins with their prices, written by the same hand as the manuscript instructions on coin collecting prepared by Sebastian Bianchi for Viscount Huntingdon. This introduces the possibility that Dugood may have had some assistance with his catalogue, possibly from Bianchi.

Dugood undoubtedly arranged his casts according to the ordering of the original coins in the Farnese collection, for both his list and the Burton Constable casts of Roman Imperial coins replicate, for the most part, the coins illustrated in the Pedrusi/Piovene volumes. The notable discrepancy is among the number of casts taken from smaller bronze coins, where Dugood reproduces forty-eight examples for the Emperor Domitian and fifty-four for Trajan, while in I Cesari in metallo mezzano e piccolo (volumes IX and X) Piovene illustrates 175 examples for Domitian and 235 for Trajan. There are also some very minor inconsistencies between Dugood's own manuscript catalogue and the casts surviving in the cabinet. It is noteworthy, however, that besides the Imperial coins catalogued by Pedrusi/Piovene, Dugood also took casts of a further 770 bronze coins of later emperors from Hadrian to Valens in addition to some 1,700 Roman Consular and Greek coins in the Farnese collection.

It seems that Dugood must have had the cabinet for the coin casts constructed before he embarked on the task of copying the coins, so that it would be ready to receive the thousands of casts in the correct sequence. Even so, some of the trays have been renumbered and it appears that they had to be rearranged in order to maintain the proper order. There are spaces for 102 solid wood sliding trays, each containing numerous shallow circular recesses arranged in pairs of appropriate size to contain casts of the obverse and reverse faces of each coin. All the trays are numbered and paper labels glued to the front of selected trays identify the section, while further labels attached to the upper surface of individual trays name the specific Greek province, Roman ruler etc. represented.

The significance of Dugood's coin casts arises from the singular nature of ancient coins. Although coins are not generally regarded as unique objects, as ancient coins were individually struck and also display distinctive patterns of wear, no two coins are identical. Dugood's high-quality sulphur casts accurately reproduce both the idiosyncrasies of the manufacturing process and the wear pattern for both sides of every coin. For example, on the Farnese tetradrachm of Philetaerus of Pergamon, there is a tiny triangular indentation towards the left of the obverse face together with further similar indentations on the upper left and lower right of the reverse. All these marks can clearly be seen on Dugood's casts (Fig. 14).68 Similarly, the Farnese tetradrachm of Mithradates VI is badly worn, particularly on the reverse, and this unique wear pattern is replicated in Dugood's casts (Fig. 15).69 Dugood's collection of coin casts therefore presents the opportunity not only to provide a more comprehensive catalogue of



Fig 14. Grey sulphur cast taken by Dugood from a silver tetradrachm of Philetaerus of Pergamon in the Farnese collection.



Fig. 15. Grey sulphur cast taken by Dugood from a silver tetradrachm of Mithradates VI in the Farnese collection. The cast of the reverse is slightly damaged on the right hand side.

the Farnese coin collection but also to identify individual Farnese coins from among the many thousands of ancient coins in the National Archaeological Museum in Naples. By this means, it would be possible to reassemble much of the Farnese collection of Greek and Roman coins.

'Leaden medals in hollow'

Although Constable's memo describes Dugood's moulds as 'a collection of Leaden medals in hollow to take impressions with of the actions of Lewis 14th of France', the collection also includes Papal medals and a selection of seventeenth- and eighteenth-century European medals. The stated purpose that these moulds were to be used to produce sulphur casts is demonstrated in the survival of forty-eight grey and red sulphur medal casts taken from these moulds (Fig. 16). As with the gem casts, Constable's memo does not specifically say that the medal moulds were taken from medals in the Farnese collection, although the inclusion of a mould taken from a bronze medal of Alessandro Farnese (Pope Paul III) together with several others taken from medals relating to Farnese family members, may well suggest that this was the case. Nevertheless, Dugood evidently continued copying medals after he had moved to Portugal since one of his moulds was cast from a medal of Maria Theresa, Holy Roman Empress, that was designed by Matthäus Donner (1704-56) and struck in 1741, eight years after Dugood had left the Farnese's service in Parma.

Although Dugood's moulds are taken from medals that are mostly well known, the moulds themselves are very unusual survivals and hugely revealing about the materials and technology that Dugood employed. They are made from a lead alloy comprising 90% lead and 10% tin, which not only has a low melting point but also the property of remaining paste-like over a wide temperature range, making it ideal for pressing into the surface of a medal to produce a mould.⁷⁰ There appear to be no comparable moulds of this type surviving elsewhere, as moulds of plaster or sulphur were generally used to take casts from medals. Most of Dugood's moulds are made from a very thin disc of alloy that can easily become distorted, and many of them have been damaged through poor handling and unsuitable storage. Nevertheless, when compared to sulphur, and more particularly plaster, they are much more durable and still retain their surface detail.

Conclusion

As Constable noted in the margin of his memorandum, the remarkable William Dugood served kings and princes throughout Europe, besides which he was a serious scientist with particular interests in magnetism and mineralogy. He risked his life by engaging in espionage and risked further peril through association with the network of European freemasonry. His friendship with Portuguese courtiers such as Don Pedro António de Noronha, 'Viceroy of India and Brazil', might suggest significant involvement in the international diamond trade, although little can be discovered of his activities in Portugal.71 As Skinner reported, Dugood dealt both in diamonds and cameos, which opens up the possibility that some of the casts at Burton Constable were taken from gems that passed through Dugood's hands. Whether he came by these honestly



Fig. 16. Dugood's lead alloy moulds taken from a medal of Pope Clement X, 1675, by Giovanni Hamerani (1649–1705), with a view of the Vatican on the reverse and (above) Dugood's sulphur impression.

or through skulduggery cannot be determined: the accusation of stealing jewels made against Dugood by the Jacobites was never substantiated, and the Dowager Duchess of Parma and her minister both expressed total confidence in his integrity. The scheme to copy Farnese gems, coins and medals appears to have been mainly opportunistic, since Dugood would have realized that the access he had while working as the Farnese's jeweller was a rare privilege and not likely to be repeated. He undoubtedly took casts for his own study and collecting purposes, although perhaps also with a view to manufacturing reproductions to feed the growing craze for cast collecting. In the event, it appears that Dugood did not develop his cast-making techniques into a business with the selling of reproductions, even though some of his casts may have been passed on via Stosch to be used by others in this way.

Dugood evidently valued his collection and it may even have been among his 'papers and effects' that were seized by the Justices when he was arrested in Florence, and which he retrieved only after paying a fine.⁷² He managed to take the collection with him when he fled from Italy in 1734 and held it together for many years until he sold it to William Constable in 1760. For Constable, the collection appears to have been little more than an interesting addition to his museum, and he would be unaware that even then it would have been significant for documenting the Farnese collections, which had been transferred from Parma to Naples and were already becoming disordered.⁷³ Although a more detailed investigation of Dugood's extensive collection surviving at Burton Constable is required, even this preliminary assessment establishes its importance, most particularly for the Farnese collection of Greek and Roman coins.

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Notes and references

The following abbreviations are used throughout: TNA/SP—The National Archives, State Papers. MNN—Museo Nazionale di Napoli.

- 1 London Chronicle or Universal Evening Post, vol. VIII, no. 534 (1760), p. 518.
- 2 East Riding Archive Office, Beverley; Chichester Constable Papers (hereafter DDCC). There are several vouchers relating to this shipment including details of shipping and landing charges, a bribe for Captain Coombes to understate the value of the consignment, Customs Duty paid (DDCC 153/51/28) and transport from London to Burton Constable (DDCC 153/51/20).
- 3 Copy of Mr Shepperd's Accounts (2 February 1760), DDCC /153/20A/5. For Barnard (alias Woodbury), see J. Kirk, *Biographies of English Catholics* (London, 1909), p. 10.
- 4 There is a brief account of William Dugood in L. Lewis, Connoisseurs and Secret Agents in Eighteenth Century Rome (London, 1961), pp. 70–1, and a summary of his visits to Italy in J. Ingamells, A Dictionary of British and Irish Travellers in Italy 1701–1800 (New Haven and London, 1997), p. 317.
- 5 TNA/SP 85/14, fol. 162. Report from Philip Stosch in Rome dated 17 November 1722. For Stosch, see Lewis, op. cit. (note 4) and L. Lewis 'Phillipp von Stosch', *Apollo* 85 (1967), pp. 320–7.
- 6 I am grateful to Andrew Moore for providing details of the entries in the account book of Thomas Coke's (1697–1759) expenses 1714–18, kept by Edward Jarrett. Holkham MSS 733, 734.
- 7 HMC Stuart: Calendar of the Stuart Papers belonging to His Majesty the King preserved at Windsor Castle, Historical Manuscripts Commission (London, 1902–23), vol. vi, p. 591. Letter dated 29 June 1718, from Francis Panton to John Erskine, 6th Earl and 1st Duke of Mar (1675–1732) with a request that Dugood be granted a warrant to become the King's jeweller.
- 8 Royal Archives, Windsor Castle SP/34/69. The Royal Archives also contain a letter dated 14 September 1718, written by Dugood to the Duke of Mar, expressing his gratitude for recommending him as jeweller. SP/36/68.
- 9 TNA/SP 85/14, fol. 162 (17 November 1722) and fol. 451 (September 1723). Reports from John Walton (code name for Philip von Stosch). Stosch's intelligence reports are written in French and once they arrived in Whitehall, the sections in cipher were decoded (into French). Stosch first reported to John Carteret, 2nd Earl Granville (1690–1763) who served as Secretary of State for the Southern Department from 1721 to 1724, then to his successor Thomas Pelham-Holles, 1st Duke of Newcastle (1693–1768).
- 10 For Colonel John Hay (1691–1740), see Ingamells, op. cit. (note 4), pp. 476–7.
- 11 The details were recounted some ten years later in a letter from Brinley Skinner (1696–1764), acting British Resident in Florence, to Charles Delafaye (1677–1762), Under Secretary of State, Whitehall. TNA/SP 98/34 (11 October 1733).
- 12 TNA/SP 85/14, fol. 162 (17 November 1722). Report from Walton/Stosch.
- 13 TNA/SP 85/14, fol. 166 (21 November 1722). Report from Walton/Stosch.

- 14 TNA/SP 85/14, fol. 181 (1 December 1722). Report from Walton/Stosch.
- 15 Document entitled 'dugoods account of his persecution' enclosed within Skinner's letter to Delafaye. TNA/SP 98/34 (11 October 1733).
- 16 TNA/SP 85/14, fol. 451 (September 1723). Report from Walton/Stosch.
- 17 The gem collection of William Cavendish, 2nd Duke of Devonshire (1672–1720) survives at Chatsworth.
- 18 TNA/SP 98/32 (19 September 1733). Report from Walton/ Stosch, stating that Dugood was known in London where he mounted the famous lodestone of the Duke of Devonshire. Dugood's dissertation on magnetism also records that Dugood mounted a large lodestone for the Duke of Devonshire. Dessertacaõ sobre os Maravilhosos effeitos do Magnete ou Pedra de Cevar Feita por Guilherme Dugood da Sociedade de Londres, manuscrito, cota 40-III-20 (5) Biblioteca da Ajuda, Lisbon. I am grateful to Dr Ermelinda Artunas for drawing Dugood's dissertation to my attention and for providing a copy.
- 19 C. Jungnickel and R. McCormmach, *Cavendish. The Experimental Life* (Lewisburg, 1999), pp. 60–1. The lodestone is displayed in the Museum of the History of Science, Oxford. no. 47759.
- 20 United Grand Lodge of England, Library and Archives, *Register of Names belonging to Historical English Lodge of Freemasons.* The lodge at *The Three Tuns*, Billingsgate was established in 1729 and Dugood is recorded as a member in 1731.
- 21 Royal Society, Journal Book, vol. XIII, 1726–31, fol. 190. For Martin Folkes (1690–1754), see Ingamells, op. cit. (note 4), pp. 365–6.
- 22 Following the issue of a Papal Bull in 1738 by Pope Clement XII prohibiting Catholics from becoming Freemasons under threat of excommunication, suppression of Portuguese Freemasonry by the Inquisition commenced. The Swiss jeweller John Coustos (1703–46), a lodge Master, was arrested and tortured in 1743. He revealed that Dugood had set up the first lodge of Freemasons in Lisbon some fifteen years previously. J. Coustos, *The Sulferings of John Coustos for Free-Masonry and for His refusing to turn Roman Catholic in the Inquisition at Lisbon* (London, 1746), p. 42.
- 23 TNA/SP 98/33 (28 December 1731). Colman to Duke of Newcastle. For Francis Colman (1690–1733), see Ingamells, op. cit. (note 4), pp. 231–2.
- 24 For Denys Wright (c.1687-1737) see ibid., p. 1021.
- 25 Don Carlos (1712–88) was the son of Philip V of Spain and Elizabeth Farnese and became Duke of Parma in 1731, King of Naples and Sicily in 1735 (when he ceded Parma to Emperor Charles VI) and ruled as Charles III of Spain from 1759.
- 26 TNA/SP 98/34 (20 September 1733). Skinner to Delafaye.
- 27 'dugoods account of his persecution', op. cit. (note 15).
- 28 The Farnese Casket was made for Alessandro Farnese (1520– 89) by the goldsmith Manno Sbarri (*fl*. 1548–61) and Giovanni Bernardi. It is now in the Capodimonte Museum, Naples.
- 29 In his acount (see note 15) Dugood states that he was made Jeweller to Infant Duke 'with a good provision, but was deprived of it at the Instance of the Pretender & his Party.' Skinner also reports that Dugood was dismissed from service to the Farnese as a result of a 'complaint against him from the Pretender's people at Rome.' TNA/SP 98/34 (20 September 1733).

- 30 Skinner states that Dugood received a 'handsome pension' from the Farnese. TNA/SP 98/34 (20 September 1733).
- 31 The letter of recommendation from the Dowager Duchess of Parma (Dorothea Sophie von Neuburg 1670–1748), dated 28 July 1733, was addressed to the 'Pretendress' (Princess Clementina Sobieska 1702–35, wife of James Edward Stuart). The letter of recommendation from 'Marquis' Ignazio Felice Santi, Secretary of State to the Dowager Duchess of Parma, dated 28 July 1733, was addressed to the Infant Duke's Minister in Rome. Copies of both letters, which were made by Brinley Skinner without Dugood's knowledge, were enclosed within Skinner's letter to Delafaye. TNA/SP 98/34 (11 October 1733).
- 32 TNA/SP 98/34 (20 September 1733). Skinner to Delafaye.
- 33 See note 32. For Tyrell (*d*. 1753), see Ingamells, op. cit. (note 4), p. 961.
- 34 See note 15.
- 35 Stosch reported that Dugood was arrested on the orders of Colonel Flava, Minister of the Infant Duke of Parma, adding that 'the said Minister acted in this affair only in order to please Tyrell, agent and declared Minister of the Pretender, who had received orders from Rome to this effect.' TNA/SP 98/32 (19 September 1733). See also Skinner's letter to Delafaye TNA/ SP 98/34 (20 September 1733).
- 36 TNA/SP 98/32 (26 September 1733). Report from Walton/ Stosch.
- 37 For Stosch's seminal work on engraved gems, see P. Stosch and B. Picart, *Gemmae Antiquae Caelatae* (Amsterdam, 1724).
- 38 The document consists of twenty-four pages bound within a soft cover with embossed decoration measuring 22.5 × 17.5 cm. The front cover is inscribed inside by William Constable: 'Manuscript Very Imperfect from Lisbon'. The manuscript itself is written in Latin with numerous notations added by Constable. I am grateful to Philip Attwood and Richard Abdy for their comments on the manuscript.
- 39 Martin Folkes was in Florence during his Grand Tour. Sir Hugh Smithson (1715–86), created Duke of Northumberland in 1766, succeeded as 'Chief Master' of the Florence Lodge in May 1733. Cocchi was initiated into the Florentine Lodge in 1732 and later became Master. For details of Cocchi, Stosch and the Florentine Lodge see H. Hans, 'The masonic lodge in Florence in the eighteenth century', Ars Quatuor Coronatorum 81 (1958), pp. 109–12.
- 40 Stosch reported that Cardinal Albani and several other cardinals openly protected Dugood, determined to put an end to the excessive authority of the Pretender's ministers. TNA/ SP 98/32 (9 December 1733). The reason for the quarrel is revealed in a letter from Skinner to the Foreign Secretary: 'The Cardinals Hannibal, Albani and Imperiali have protected Dugood or Duckett against all the oppositions of the Pretender and his imprisonment of him. Notwithstanding the Pretender's great obligations to the Albani family, he has highly provoked the Cardinal in preventing the Pope's return of the Cap to his Family, and this at the instigation of Murray in order to oblige the Countess Lagnaskie in the promotion of a Friend of hers and the quarrel between the Cardinal and the Pretender, I am told, is carried to such a pitch, that it occasioned so violent a fit of usage and grief in him some weeks ago, as obliged them to call the Pretendress one night out of her bed to pacifie him.' TNA/SP 98/32 (7 January 1734).
- 41 TNA/SP 98/35 (1 May 1734). Skinner to Delafaye.

- 42 In his undated dissertation *Dessertacaõ sobre os Maravilhosos* effeitos do Magnete (op. cit., note 18) written in Portuguese, Dugood states that he carried out observations on the Portuguese coast in 1733, although he did not arrive in Portugal until early 1734. The only credible explanation is that the dissertation was written many years later and that Dugood's memory was at fault. The Gregorian calendar (where the new year started on 1 January) had long been in use in Portugal and it seems unlikely that Dugood would have used the Julian calendar (where the new year started 25 March) that was in use until 1752 in Britain.
- 43 University of Coimbra, Physics Department Collection, no. 40. An eighteenth-century engraved illustration, signed by Inácio de Oliveira, contains the information that Dugood mounted the lodestone in Lisbon. A second lodestone in the Coimbra collection, no. 41, is signed on the mount: Gul.mus Dugood F.R.S. Paranit Lisboneae MDCCLI.
- 44 In his account, Coustos (see note 22) states that Dugood had travelled with 'and was greatly beloved by' Don Pedro António de Noronha (1661–1731), favourite of King John V and Viceroy of Portuguese India and later of Brazil. Since Don Pedro António died in 1731, Dugood's association with him must have dated from prior to his taking up permanent residence in Portugal in 1734, and supports Coustos's assertion that Dugood was in Lisbon c.1727–8 when he set up a lodge of Freemasons. Dugood was also a friend of the private secretary to King John V, Alexandre de Gusmao (1695–1753). A. H. R. de Oliveira Marques, *História da maçonaria em Portugal* (Lisbon, 1997), pp. 23–4.
- 45 For William Constable and his collections, see I. Hall and E. Hall, Burton Constable Hall. A Century of Patronage (Hull, 1991); D. Connell 'The Grand Tour of William & Winifred Constable 1769–71', Burton Constable Hall. The Eighteenth and Nineteenth centuries, East Yorkshire Local History Society (Hull, 1998), pp. 38–55; D. P. Connell and M. J. Boyd 'Material from the 'Musaeum' of Ralph Thoresby (1658–1725) preserved at Burton Constable Hall, East Yorkshire', Journal of the History of Collections 10 (1998), pp. 31–40.
- 46 DDCC 145/1. A Portuguese moidore was a gold coin worth approximately £1 7s.
- 47 See note 2.
- 48 Each cabinet measures 80 cm high \times 95 cm wide \times 33 cm deep.
- 49 Mr Sheppard's Accounts. '1761 October 10, Pd. Dr. Bernard in Lisbon for Marbles—£2-0-5³/4'. DDCC/153/20A/5.
- 50 The handwriting on the labels is identifiable as Dugood's from comparison with his letter of thanks to the Duke of Mar (see note 8). Constable also purchased Roman coins from Barnard. DDCC 2/43/B2.
- 51 I am deeply indebted to Michael Boyd who identified the document and realized its significance for the collection of casts at Burton Constable.
- 52 For a comprehensive discussion of the Farnese gem collection and catalogue of the 491 identified gems, see C. Gasparri (ed.), *Le Gemme Farnese* (Naples, 1994), (hereafter *GF*).
- 53 *Bacchus on his Chariot*, red sulphur cast 5.3×4.4 cm; from chalcedony cameo MNN 25840; *GF* 30. Dugood's cast includes a frame that has since been removed from the gem.
- 54 Cleopatra, grey sulphur cast 4.0 × 2.5 cm; R. E. Raspe, A Descriptive Catalogue of a General Collection of Ancient and Modern Engraved Gems, Cameos as Well as Intaglios: Taken

from the Most Celebrated Cabinets in Europe and Cast in Coloured Pastes, White Enamel, and Sulphur, 2 vols. (London, 1791) (hereafter Raspe/Tassie), no. 9871.

- 55 Bacchus supported by Silenus, red sulphur cast 4.2×3.8 cm; Raspe/Tassie 4309 described as: 'Bacchus with a thyrsus, supported by Silenus and followed by Cupid, or Hymen, with a large torch, finding Ariadne among the rocks of Naxos'.
- 56 Aesculapius, grey sulphur cast 3.8 × 3.0 cm; from bloodstone intaglio MNN 26243; GF 214; Raspe/Tassie 4101.
- 57 Artemis, grey and red sulphur casts 2.8 × 1.7 cm; from sardonyx cameo MNN 25874; GF 156; Raspe/Tassie 2083. Chariot with Four Horses, red sulphur cast 3.5 × 5.0 cm; from sardonyx cameo MNN 26022; GF 219; Raspe/Tassie 7800. Dionysius, red sulphur cast 2.9 × 1.9 cm; from sardonyx cameo MNN 25908; GF 6; Raspe/Tassie 4199.
- 58 The six plasters: Naval Battle; Battle of the Centaurs and Lapiths; Battle of the Amazons; Triumph of Bacchus and Silenus; Chariot Race in the Circus; Caledonyan Boar Hunt each measure approx. 9.7 × 11.5 cm.
- 59 Alexander the Great, grey and red sulphur casts 5.0 × 4.0 cm; from plack paste relief MNN 26888. Medusa, grey sulphur cast 2.1 × 2.1 cm; from cameo MNN 26830. Athena, red sulphur cast 3.3 × 2.2 cm; from onyx cameo MNN 26848. Portrait bust of a woman, grey sulphur cast 1.4 × 1.2 cm; from onyx cameo MNN 26871. Portrait bust of a man wearing a headband, grey sulphur cast 2.7 × 1.9 cm; from agate intaglio MNN 26262 (as eighteenth century copy). Eagle, grey sulphur cast 4.8 × 3.6 cm; from sardonyx cameo MNN 26922. Murex shell, grey sulphur cast 1.0 × 0.9 cm; from cornelian intaglio MNN 26543.
- 60 Supplication of Dirce, red sulphur cast 1.6 × 2.3 cm; from chalcedony cameo MNN 25897; GF 143.
- 61 *Curzio Rufo*, red sulphur cast 4.0 × 5.0 cm; from chalcedony cameo MNN 26831; *GF* 272; Raspe/Tassie 10621 (without frame).
- 62 MNN 10222.
- 63 Plaster 10.0 × 6.5 cm. The composition appears identical to that engraved on an onyx cameo in the Hermitage Museum, St Petersburg 7.4 × 5.6 cm from the collection of Duke of Orleans, Paris 1787, as sixteenth century Florentine. Jeremy Warren, however, has suggested (personal communication) that the image appears to be late sixteenth-century Milanese in the style of Annibale Fontana (1540–87).
- 64 Tazza Farnese, red sulphur cast 16 cm diameter from sardonyx-agate cameo (bottom of bowl) MNN 27611; GF 1.
- 65 P. Pedrusi, I Cesari in oro, vol. 1 (Parma, 1694); I Cesari in argento, vol. 11 (Parma, 1701); vol. 111 (Parma, 1703); vol. 1V (Parma, 1704); I Cesari in medaglioni, vol. V (Parma, 1709); I Cesari in metallo grande, vol. VI (Parma, 1714), vol. VII (Parma, 1717), vol. VIII (Parma, 1721) (posthumous). P. Piovene,

I Cesari in metallo mezzano e piccolo, vol. IX (Parma, 1724); vol. X (Parma, 1727).

- 66 For a detailed discussion of the Farnese coins, see R. Cantilena, 'La collezione di monete dei Farnese: per la storia di un "nobilissimo studio di medaglie antiche", *I Farnese: Arte e Collezionismo*, exh. cat., Palazzo Ducale di Colorno, Parma (4 March-21 May 1995), Haus der Kunst, Munich (1 June-27 August 1995), Galleria nazionale di Capodimonte, Naples (30 September-30 December 1995), pp. 139–51. The detailed catalogue includes twenty-nine Greek and Roman coins from the Farnese collection (nos. 205–33, pp. 424–38) that Professor Cantilena has identified in the collections of the MNN.
- 67 The manuscript list is contained in a paper bound booklet measuring 17.8×11.8 cm with thirty-four numbered pages. At the end of the catalogue are four pages listing rare coins with their prices written in the same hand as the manuscript on coin collecting prepared for Theophilus Hastings (see note 38).
- 68 Tetradrachm, Philetaerus of Pergamon, silver, *c*.274–63 BC 28 mm diameter, MNN, F.g.7942. *I Farnese*, op. cit. (note 66), no. 208, p. 426.
- 69 Tetradrachm, Mithradates VI of Pontus, silver, 90–89 BC 30 mm diameter, MNN, F.g.7723. *I Farnese*, op. cit. (note 66), no. 214, p. 428.
- 70 My thanks to Philip Attwood, who persuaded his colleagues at the British Museum to analyse a sample of the alloy.
- 71 See note 44.
- 72 See note 15.
- 73 Although Constable was in some respects an assiduous collector, most of his museum collection was acquired, preassembled, from a variety of well-established collector/ dealers. He purchased large numbers of shells and 'fossils' from Emanuel Mendes da Costa (1717-91) and Thomas Pennant (1726-98). See M. J. Boyd, 'William Constable's "fossil cabinet" and M. J. Boyd and E. Hall, 'William Constable's zoological collection', in Hall, op. cit. (note 45), pp. 42-7 and pp. 48-50. For the acquisition of a substantial group of items from Ralph Thoresby's museum via Dr John Burton see Connell and Boyd, op. cit (note 45). Constable displayed little respect for Dugood as a collector as is evident in his disparaging comment about Dugood being 'illiterate', and in his comment scrawled on the inside cover of Bianchi's manuscript on coin collecting: 'manuscript, very imperfect from Lisbon'. He also displayed little regard for Dugood's collection as a discrete entity. Besides re-labelling the geology specimens and incorporating them into his own collection, Constable also re-labelled (mostly inaccurately) many of Dugood's gem casts. In addition, he discarded a number of the trays in Dugood's cabinet that had originally contained gem casts, creating extra space which allowed the remaining trays to be re-labelled for storing unrelated geology specimens.