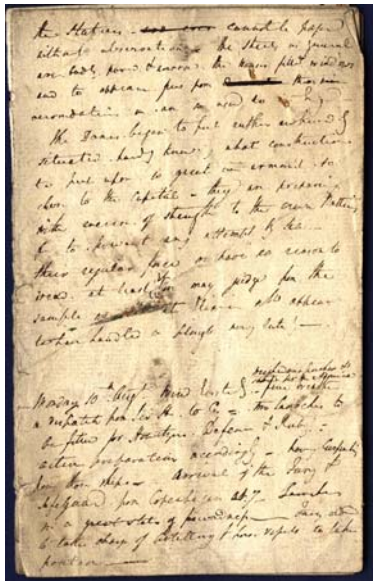
SIR WILLIAM CONGREVE (1772-1828).



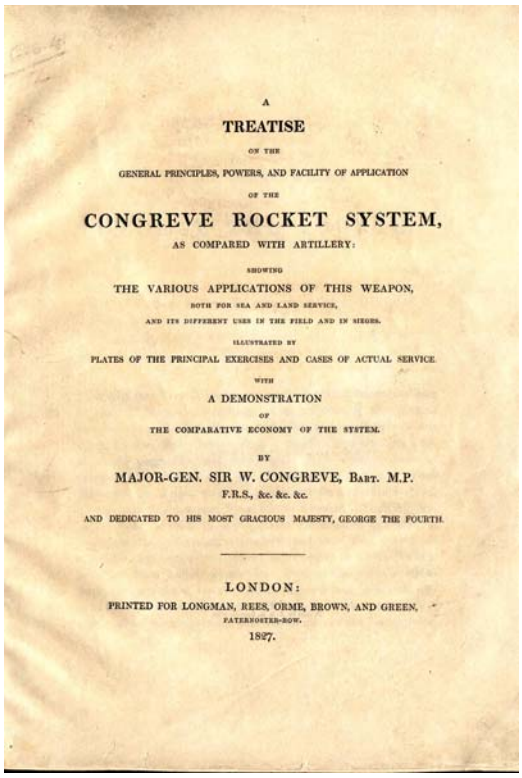
Left: William Congreve at the 1807 bombardment of Copenhagen, where he directed the launch of about 300 of his own war rockets (S.I. A1126A; reproduced from Winter 1990, p. 21)

Right: A page from Congreve's 1807 diary of the Copenhagen bombardment, contained in the Congreve archive offered below.

(1) Archive of 116 manuscripts, including Congreve's diary of the 1807 Copenhagen bombardment, 30 other manuscripts relating to Congreve war rockets and other military matters, 22 love letters from Congreve to his wife, and 27 manuscripts relating to Congreve's financial affairs. 1803-1869. Preserved in a cloth drop-back box.

Bookplate of Ernst Augustus, Duke of Cumberland, in this bound volume of pamphlets on rocketry. The Duke was head of the Hanoverian Army, in which Congreve held the commission of lieutenant colonel.

(2) Bound volume of 7 printed pamphlets by Congreve on his rocket system, as follows: *[1]* A concise account of the origin and progress of the rocket system . . . [6], 32, [2]pp. London: J. Whiting, 1810. Second edition. *[2]* Postscript to the concise account of the origin and properties of the rocket system. 15pp. London: J. Whiting, 1808. *[3]* The different modes of use and exercises of rockets, both for bombardment and for the field. 20pp. 4 engraved plates. London: James Whiting, 1810. *[4]* Detail of a plan for attaching to cavalry regiments a proportion of rocket artillery, with case shot . . . 10pp. 2 folding engraved plates. London: James Whiting, 1809. *[5]* General view &c. General view of a complete course of experiments proposed to be tried . . . for the investigation and organization of the rocket system . . . [caption title]. 24pp. N.p., n.d. [1807 or after]. *[6]* Memoir on the possibility, the means, and the importance, of the destruction of the Boulogne flotilla . . . [2], 34, [2, blank]pp. London: J. Whiting, 1806. *[7]* Explanation of the plan and intention of the project mortar boat [caption title]. [9]-11pp. Folding engraved plate. [London]: Whiting, November 1807. Together 7 items in 1, 4to. 222 x 177 mm. Tree calf ca. 1810, rebacked preserving original gilt spine and leather label, small scratch on back cover; preserved in a cloth drop-back box. Engraved bookplate of Ernst Augustus, Duke of Cumberland and later King of Hanover (1771-1851), brother of George IV and head of the Hanoverian army, in which Congreve held the commission of lieutenant colonel.



A

TREATISE

ON THE

GENERAL PRINCIPLES, POWERS, AND FACILITY OF APPLICATION

OF THE

CONGREVE ROCKET SYSTEM,

AS COMPARED WITH ARTILLERY:

SHEWING

THE VARIOUS APPLICATIONS OF THIS WEAPON,

BOTH FOR SEA AND LAND SERVICE,

AND ITS DIFFERENT USES IN THE FIELD AND IN SIEGES.

ILLUSTRATED BY

PLATES OF THE PRINCIPAL EXERCISES AND CASES OF ACTUAL SERVICE.

WITH

A DEMONSTRATION

OF

THE COMPARATIVE ECONOMY OF THE SYSTEM.

BY

MAJOR-GEN. SIR W. CONGREVE, BART. M.P.

F.R.S., &c. &c. &c.

AND DEDICATED TO HIS MOST GRACIOUS MAJESTY, GEORGE THE FOURTH.

LONDON:

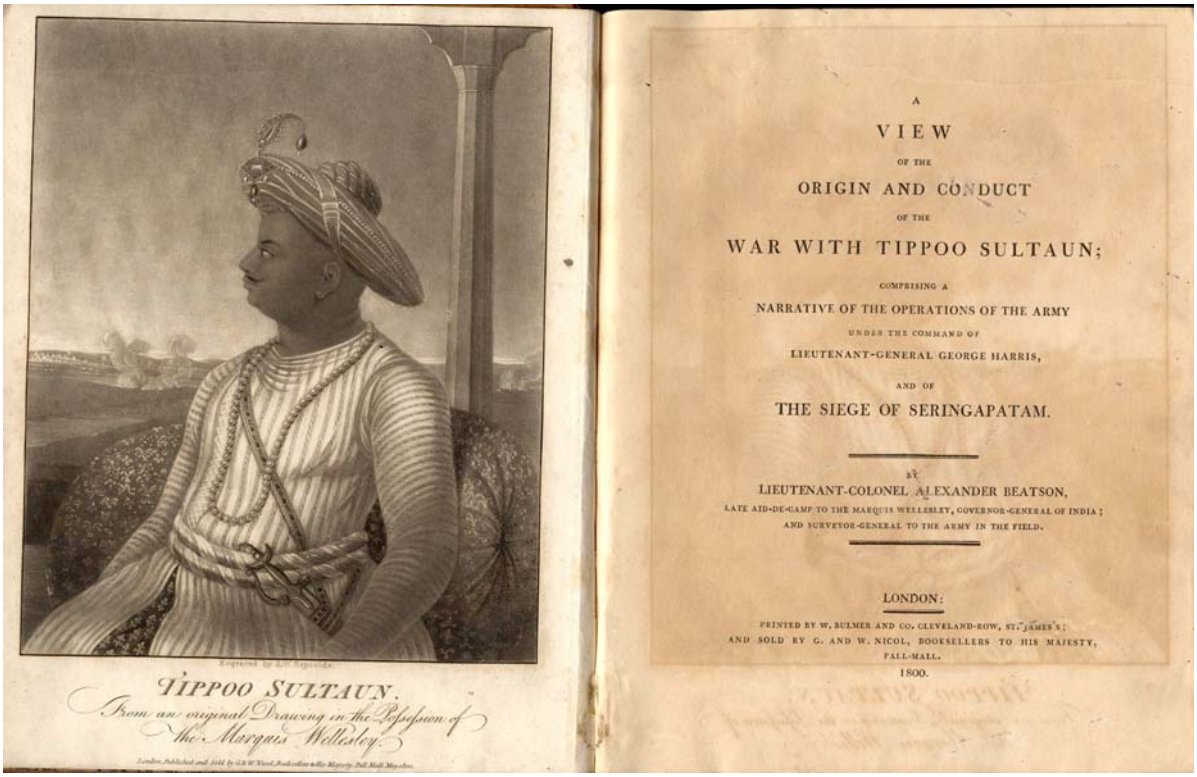
PRINTED FOR LONGMAN, REES, ORME, BROWN, AND GREEN,

PATERNOSTER-ROW.

1827.

(3) Congreve. A treatise on the general principles, powers, and facility of application of the Congreve rocket system as compared with artillery. . . . 4to. 84 [i.e., 80]pp. 12 engraved folding plates. London: Longman, Rees, Orme, Brown and Green, 1827. 277 x 211 mm. Quarter morocco, marbled boards in period style; preserved in a cloth drop-back box. Minor foxing to some plates, occasional faint offsetting from plates. From the library of historian of rocketry and space travel, Frederick I. Ordway III, with his bookplate.

(4) Beatson, Alexander (1759-1833). A view of the origin and conduct of the war with Tippoo Sultaun; comprising a narrative of the operations of the army under the command of Lieut.-General George Harris, and of the siege of Seringapatam. 4to. xxiii, 265, clxxii pp. Engraved frontispiece portrait and 5 folding plates (1 hand-colored), 2 folding printed tables. London: G. & W. Nicol, 1800. 268 x 218 mm. Mottled calf gilt ca. 1800, spine and corners worn, chip in lower spine, hinges cracked. Moderate foxing and toning, some offsetting from plates. From the library of Frederick I. Ordway, with his bookplate.



TIPPOO SULTAUN.

From an original Drawing in the Possession of the Marquis Wellesley.

A

VIEW

OF THE

ORIGIN AND CONDUCT

OF THE

WAR WITH TIPPOO SULTAUN;

COMPRISING A

NARRATIVE OF THE OPERATIONS OF THE ARMY

UNDER THE COMMAND OF

LIEUTENANT-GENERAL GEORGE HARRIS,

AND OF

THE SIEGE OF SERINGAPATAM.

BY

LIEUTENANT-COLONEL ALEXANDER BEATSON,

LATE AID-DE-CAMP TO THE MARQUIS WELLESLEY, GOVERNOR-GENERAL OF INDIA;

AND SURVEYOR-GENERAL TO THE ARMY IN THE FIELD.

LONDON:

PRINTED BY W. BULMER AND CO. CLEVELAND-ROW, ST. JAMES'S;

AND SOLD BY G. AND W. NICOL, BOOKSELLERS TO HIS MAJESTY,

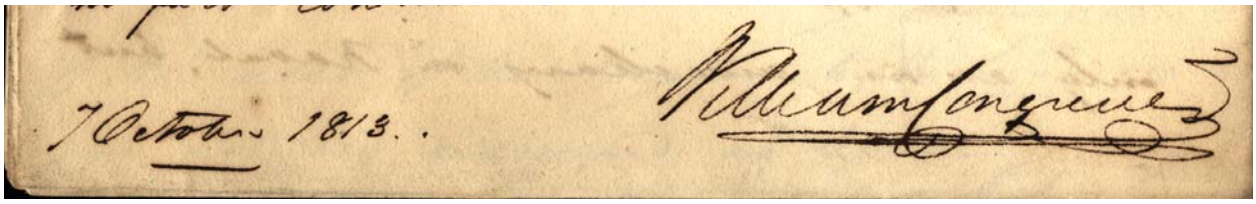
PALL-MALL.

1800.

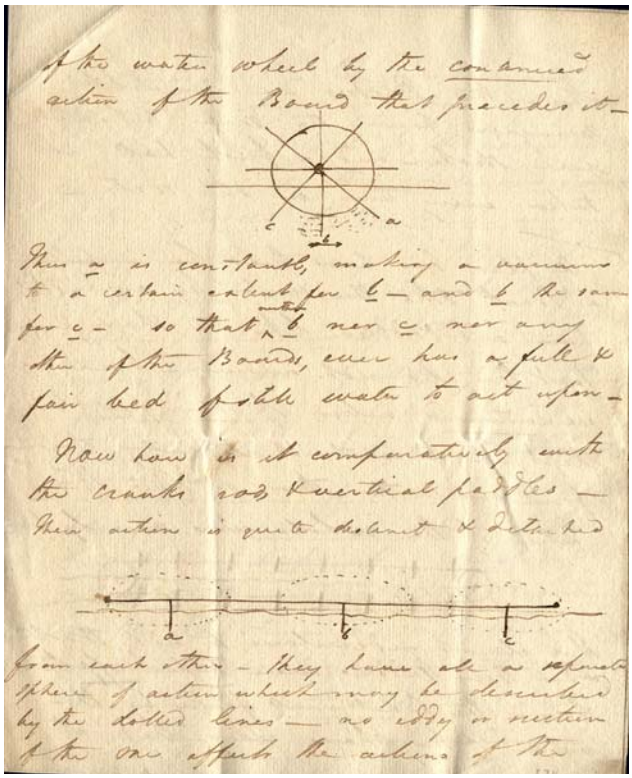
(5) Grant. Rocket practice in the marshes. Hand-colored aquatint engraving. Woolwich: J. Grant, 1845. 343 x 460 mm. Matted. From the collection of Frederick I. Ordway III, so labeled on the back of the mat. Fine.

No. (1) is *the most significant archive extant of manuscript materials* by and about the prolific English inventor and technologist William Congreve and his family. Congreve is best known for creating the first rocket weapons system and initiating the modern processes of research and development in rocketry. Our archive extends over six decades, from 1803 to 1869. No other archive or collection held by individuals or institutions compares to it. Frank Winter, rocketry historian and author of the leading book on the history of the Congreve rocket, *The First Golden Age of Rocketry* (cited here as Winter 1990), cites in that work one manuscript at the British Library (titled "A second century of inventions," BM MS. 38844) and three letters dated 1785, 1810 and 1813. OCLC records a manuscript at Princeton dated 1794-1800 and titled "Exercises and manoeuvres for two light six pounders, or two heavy 3 pounders of General Desagulier's construction"; it is not stated whether the manuscript is in Congreve's hand. RLIN records a "Signed list of ammunition needed for a particular service," dated July 6, 1793, in the collection of the Pierpont Morgan Library (it is possible that this last was actually written by Congreve's father, who was head of the Royal Arsenal). These are, as far as we know, the only recorded manuscripts relating to William Congreve apart from our archive.

Included in our archive are letters and manuscripts covering William Congreve's career in rocketry. The most notable of these is his diary of the 1807 Copenhagen bombardment, which represents the



first truly successful large-scale use of the Congreve war rocket in combat. Other noteworthy manuscripts include a signed draft and a fair copy of a "Report to the Commissioners of the Navy" dated October 1813, in which Congreve summarized his war rocketry activities from 1805 to 1813; a letter dated November 1813 relating to "the expense, or rather the economy of the Rocket System"; bills for materials used in rocket construction; an undated letter to a Captain Elliot discussing the subject of a "rocket cavalry"; letters discussing a plan of "applying Rockets for throwing ropes ashore from shipwrecked vessels"; and letters in which Congreve writes of his achievements and his attitude towards his work. The archive also contains manuscripts and letters relating to some of Congreve's other inventions: naval guns, bombships, and Congreve's design for a paddlewheel boat, which is detailed in a long letter illustrated with Congreve's sketches. Also included are a long series of love letters that Congreve wrote to his wife, Isabella, and another series of long, detailed letters written to Congreve during the last few months of his life by his secretary, R. Drake, discussing, among other things, Congreve's political career as a Member of Parliament, his precarious financial position, the publication of his *Treatise on the General Principles, Powers, and Facility of Application of the Congreve Rocket System* (1827), and negotiations with the British East India Company for exclusive rights to the Congreve war rocket for use in India.

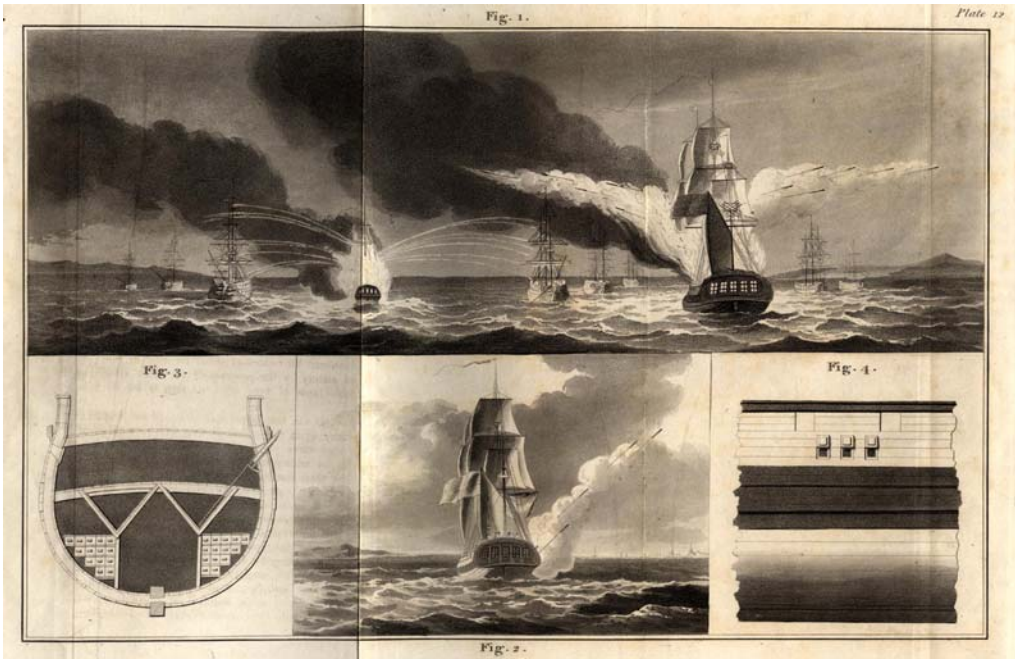


This letter contains Congrreve's rough sketches of a paddlewheel boat of his design—one of the many inventions that earned him the sobriquet "the ingenious Mr. Congreve."

Included in the remainder of the archive is a letter from Congreve's father, William Congreve Sr., to Sir Joseph Banks (1743-1820), president of the Royal Society, discussing the elder Congreve's responsibilities at the Royal Arsenal in Woolwich. Another series of letters, some written by Congreve, concern a will of which Congreve's aunt, Miss Mary Congreve, was the executrix. There are numerous letters written by Isabella Congreve after Congreve's death in 1828, mostly on financial matters—Congreve's affairs were left somewhat embarrassed upon his death, and the archive includes several records of bills and promissory notes, both paid and owing. Lastly, there are several letters presumably written by Congreve's descendants, the last dated Feb. 1, 1869. A calendar of the documents in the archive is given at the end of this description.

No. (2) is a bound collection of seven papers constituting the nucleus of Congreve's publications on rockets, beginning with his proposal for the attack on Boulogne and finishing with somewhat revised versions of his first expositions of the rocket system. An identical bound collection is held at the Naval History Center of the U.S. Navy Department Library; this suggests that Congreve had a few collections like these made, most likely for presentation. Our copy bears the bookplate of Prince Ernst Augustus (1771-1851), fifth son of George III; he was made Duke of Cumberland in 1799, and in 1837, with the death of his brother William IV, he became King of Hanover. Ernst Augustus no doubt figured largely in Congreve's sphere, both as the brother of the Prince of Wales, whose patronage Congreve enjoyed, and as the head of the Hanoverian army, in which Congreve was awarded a commission in 1811.

Tripod rocket launcher, illustrated in Congreve's The Different Modes of Use and Exercises of Rockets *(2nd ed. 1810)*



Naval rocket bombardment, as illustrated in Congreve's Treatise on the General Principles, Powers, and Facility of Application of the Congreve Rocket System *(1827)*

No. (3), *A Treatise on the General Principles, Powers, and Facility of Application of the Congreve Rocket System*, contains the fullest account of Congreve's rocket system. It is the only one of his works to contain illustrations of the Congreve rocket system in use. The plates depict the use of the rockets in various military situations: by rocket cavalry and infantry, in bombardment from earthworks, in the attack and defense of fortresses, from boats and ships, etc. Letters referring to the book's publication can be found in the Congreve archive.

No. (4), Beatson's *View of the Origin and Conduct of the War with Tippoo Sultaun,* is an account of the fourth Anglo-Mysore war (1798-99), in which Indian troops under Tipu Sultan of Mysore (1750-1799) were defeated by the British East India Company under Sir Arthur Wellesley (later Duke of Wellington). Tipu, together with his father, Hyder Ali, developed the tactic of using rocket brigades to launch mass attacks on infantry formations. These rocket attacks, used during both the third and fourth Anglo-Mysore wars, so impressed the British forces that they brought several examples of Indian gunpowder rockets back to England; these provided Congreve with the inspiration to develop his own system of war rockets.

No (5), a hand-colored aquatint engraving published by R. Grant, shows British Army war rocket practice using a rocket launcher mounted on a tripod. The image was used as an illustration in the Army and Navy Register and Woolwich Gazette for 1845.

HISTORICAL CONTEXT

The gunpowder rocket, ancestor of all rockets, was invented in China, probably shortly after the discovery of gunpowder in the thirteenth century. Although known in Europe and the Middle East prior to 1300, it was in India that the gunpowder rocket was first developed into a sophisticated weapon, and used extensively as both an anti-personnel and an incendiary device. Europeans first became seriously interested in the military uses of rockets at the end of the eighteenth century, when British troops in India were attacked with gunpowder rockets in the battles of Seringapatam (1792, 1799) during the third and fourth Anglo-Mysore wars. The British army, impressed with the Indian rockets, sent a few samples back to the Royal Artillery's Repository Museum near the Royal Arsenal at Woolwich, which had been founded in 1778 by Captain (later General) Sir William Congreve. It was there that Congreve's son, William Congreve Jr., first encountered the devices that would make him famous.

In 1804, William Congreve began experimenting with gunpowder rockets. As he later wrote, it was then that

> it first occurred to me that as the . . . rocket is exerted without any reaction from the point from which it is discharged, it might be necessarily applied, both afloat and ashore, as a military engine. . . . I knew that rockets were used for military purposes in India, but that their magnitude was inconsiderable, and their range not exceeding 1,000 yards. I knew, also, that some years since, several experiments had been made in the Royal Laboratory by General [Thomas] Desaguliers, then Fire-Master, for the construction of large rockets; but that they had not succeeded, and that very few of them would even rise off the stand (quoted in Winter 1990, p. 15).

Taking advantage of his father's influence and connections, Congreve soon gained approval for large-scale rocket production from the Master General of Ordnance, John Pitt, brother of Prime Minister William Pitt. He also won the favor of the Prince of Wales (later George IV) and of Minister of War

Robert Stewart, Viscount Castlereagh; the British government, embroiled in ongoing hostilities against the French, was eager for anything that would give its military an advantage over Napoleon's forces. Within the next few years Congreve developed his "Congreve Rocket System," the first organized weapons system created in the West. His system

> consisted of a series of calibers with warheads designed for different types of missions and support equipment for carrying and launching the weapons, including firing stands for use on land and sea; carriages; tools for servicing the rockets; the organization of rocket-armed troops; published tactical instructions and range tables for different calibers; and the standardization of rocket manufacture for mass production (Winter 1990, p. 44).

The first test of Congreve's rockets in combat, in a naval attack on Boulogne in November 1805, ended in failure due to poor weather and flaws in the rockets themselves. The following year brought success—Congreve rockets were used effectively in attacks on Gaeta (near Naples) and, under Congreve's direction, in a second attack on Boulogne. The latter venture was probably at least partly influenced by Congreve's *Memoir on the Possibility, the Means, and the Importance, of the Destruction of the Boulogne Flotilla* (see no. [2:6] above), which he issued in February 1806; the pamphlet was addressed to his friend and ally the Prince of Wales. Afterwards Congreve published a vivid account of the attack in his *A Concise Account of the Origin and Progress of the Rocket System* (1807); see no. (2:1) above for the second edition of this pamphlet (1810), which includes a postscript containing further accounts of Congreve rockets in combat.

In the summer of 1807, Congreve's rockets played an important role in the British navy's campaign against the city of Copenhagen, undertaken to keep the Danish fleet from falling into Napoleon's hands. By order of the Admiralty, Congreve was placed in charge of an independent fighting unit armed with his rockets, which were carried on three British sloops outfitted with rocket launchers. According to contemporary accounts, the first rockets of the campaign were fired on August 16; this was followed by another rocket attack on August 23. However, these were merely preliminaries to the bombardment of Copenhagen (Sept. 2-Sept. 5), where Congreve rockets filled the skies to stunning and terrifying effect. Copenhagen was soon in flames, and on September 7 the city surrendered to the British.

The rocket bombardment of Copenhagen, as Congreve wrote in the second edition of his *Concise Account of the Origin and Progress of the Rocket System* (no. [2:1]),

> did very essentially contribute to the conflagration of that city; and if the weapon was able to accomplish anything where only 300 were fired, and that only by the labour of sixteen men, partly uninstructed, what more might have not been done by it, had it been previously adopted into our military system, and put into execution by the regiment of artillery, and navy (*Concise Account of the Origin and Progress of the Rocket System*, p. 15; quoted in Winter 1990, p. 21).

After the city's surrender, Congreve went ashore in disguise to survey the destruction wrought by his rockets. He recorded his observations of the Copenhagen campaign and its aftermath in a private journal, a portion of which—probably the only extant portion—survives in no. (1).

The Copenhagen bombardment "dramatically established the efficacy of the naval rocket bombardment in major engagements . . . [and] led to the spread of Congreve rocket technology and to the formation of the first non-British war rocket establishment on the Continent" (Winter 1990, p. 22). By 1830, most European armies had their own versions of the Congreve rocket system. After the success

of the Copenhagen bombardment, the British army used Congreve's rockets successfully against the French in the battles of Leipzig (1813) and Waterloo (1815), and employed them to even greater effect against the Americans during the War of 1812—so much so that the weapons have been immortalized in our national anthem ("And the rockets' red glare, the bombs bursting in air. . .").

After 1809 Congreve ceased participating directly in any rocket battles; however, he continued to promote his rockets enthusiastically, and to involve himself in the planning stages of rocket campaigns. He also continued to exercise his inventive talents, earning himself the nickname "the ingenious Mr. Congreve." Congreve took out eighteen patents during his lifetime, two of them pertaining to rocketry—no. 4563 (1821), on a rocket harpoon to be used in whaling, and no. 9853 (1823), on a rocket flare for signaling and illuminating battlefields. Congreve's sixteen remaining patents included ones for "new methods of mounting naval ordnance, gunpowder manufacture, printing unforgeable currency, gas lighting, 'hydropneumatic' canal locks, several kinds of clocks, a perpetual motion machine, and built-in sprinkler system, and a steam engine" (DSB).

Congreve's later career is summed up by Winter as follows:

> In 1811, he was made an equerry, or honorary officer of the royal household. That same year he was elected a Fellow of the Royal Society and given the commission of lieutenant colonel of the Hanoverian Artillery, an honorary title that evolved from the personal bodyguard of the Hanoverian kings of England. Eventually, Congreve was elevated to the position of major general. . . .
>
> Congreve also maintained an interest in politics, and in 1812 was elected Member of Parliament for Gatton, Surrey. In 1820, he became an M.P. for Plymouth and was reelected in 1826, serving until his death.
>
> In 1814, Congreve's father died. His son consequently became known as Sir William Congreve, 2nd Baronet. The younger Congreve also assumed his father's post of Comptroller of the Royal Laboratory and Superintendent of Military Machines; these were life positions. As Comptroller, one of his most enjoyable duties was the direction of a grand fireworks display in 1814 celebrating the victory over Napoleon. The following year he introduced his patented improvements in gunpowder manufacture at the Arsenal. . . .
>
> With artillerist Lieutenant James Nisbett Colquhoun, Congreve adapted his rockets to whaling in 1820-21, patenting and manufacturing a rocket-propelled whaling harpoon. This particular venture, tested by whalers in the Arctic Ocean, proved to be a commercial failure.
>
> In 1824, at age 52, Congreve married the young widow Isabella Carvalho M'Envoy in Wessel, Prussia. This union produced two sons and a daughter: William Augustus, William Frederick, and Isabella Christine. . . . [A]fter Congreve's death Lady Congreve tried to obtain compensation for models of her husband's rockets.
>
> Congreve's final days were sad. In 1826, he was among those accused of fraudulence in the conduct of the Arigna Mining Company, of which he was one of the directors. The court proceedings dragged on and a decision was not announced until 1828. By then Congreve was living in the warm climate of southern France, at Toulouse, in order to regain his health; he had developed paralysis in the lower part of his body. On 15 May 1828, at 56 years of age, he died and was buried in the Protestant Cemetery with full military honors by the French garrison of the city (Winter 1990, pp. 28-29).

Congreve-type gunpowder war rockets had their heyday in the first half of the nineteenth century. The rockets offered several advantages over conventional weapons of the period—they were far lighter, and no more inaccurate, than early nineteenth-century smooth-bore artillery; and their lack of recoil meant that they could be fired from aboard ship without posing any risk to the ship's equilibrium. They were also relatively cheap to produce. By mid-century, however, Congreve rockets had lost their edge—technological improvements in conventional artillery, such as rifling and breech-loading, made guns and cannon far more accurate than old-style war rockets, and the rockets' incendiary power, so terrifying to wooden sailing ships, proved completely useless against the new iron-clad steamships. War rockets continued to be employed till the end of the century by Britain and a few other countries, thanks to William Hale's invention of the more accurate spin-stabilized rocket, introduced in the mid-1840s.

By the end of the nineteenth century the gunpowder war rocket had almost completely disappeared from military arsenals,

> but some earlier technology did survive into the next century. American rocket pioneer Robert H. Goddard conducted his first solid-fuel experiments with U.S. Navy Coston signal rockets, which were hydraulically driven and mass-produced much like Hale war rockets. . . .
>
> By 1920, Goddard had switched to experimenting with liquid propellants, which have vastly more energy potential than solid propellants, and on 16 March 1926 he launched the world's first liquid-propelled rocket, which used liquid oxygen and gasoline for fuel. The solid-fuel rocket was not forgotten, however; it underwent another phase of development from the mid-1930s and today both large and small solid-fuel rockets flourish in a variety of capacities, from weapons propulsion and boosters to launch vehicles and sounding-rocket power plants (Winter 1990, pp. xvii-xviii).

DSB. Von Braun & Ordway, *History of Rocketry and Space Travel* (1969), pp. 30-34. Winter, *The First Golden Age of Rocketry* (1990), pp. 13-29, 44-47; "The Copenhagen rocket bombardment of 1807: Some new views of early rocket history," *J. British Interplanetary Soc.* 47 (1994): 171-179.

CALENDAR OF MANUSCRIPTS IN THE CONGREVE ARCHIVE

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
1	n.d. (not after 1814)	Congreve Sr.	---	1 plus 2 frags.	plans for coffin and memorial for himself and his wife—includes sketches
2	n.d. (not after 1814)	Congreve Sr.	---	2	"The family of Congreve is of Saxon origin…"
3	n.d.	Congreve	Isabella Carvalho M'Evoy [Congreve] (ICMC)	2	love letter

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
4	n.d.	Congreve	ICMC	3	love letter
5	n.d.	[Congreve]	ICMC	4	love letter
6	n.d.	[Congreve]	[ICMC]	6 plus integral blank (frag.?)	incomplete love letter (no salutation; seems to begin in the middle)
7	n.d.	[Congreve]	ICMC	4 (frag.?)	love letter
8	n.d.	Congreve	ICMC	4	love letter
9	n.d.	Congreve	ICMC	2 plus integral blank	love letter
10	n.d.	[Congreve]	ICMC	8	unsigned love letter
11	n.d.	Congreve	ICMC	4	love letter
12	"Twelve tonight"	[Congreve]	ICMC	4	love letter (bottom line of last page torn off)
13	"Thursday morn."	Congreve	ICMC	3.5	love lette r
14	"April 13"	Congreve	ICMC	4	business/investments
15	"24 Dec." (not before 1824)	Congreve	ICMC	1.5 plus integral address leaf	love/family (addressed to "Lady Congreve"; therefore after their marriage)
16	"31 Oct." (not before 1824)	Congreve	ICMC	1 plus integral address leaf	love letter
17	n.d.	Congreve	ICMC	4 (frag.?)	family matters
18	n.d.	Congreve	ICMC	2 (frag.)	love letter
19	n.d.	[Congreve]	ICMC	3	unsigned love letter
20	"5 o'clock"	Congreve	ICMC	4	love/family
21	"half past one"	[Congreve]	ICMC	3.5	love letter
22	n.d.	Congreve	---	3	debts/assets balance sheet
23	n.d.	?	?	2.25	unsigned draft—"having also received the account of the late practice on Sutton Heath from the Board of Ordnance I beg to enclose an analysis…"

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
24	n.d.	?	---	1	"Memorandum of the prime cost of three thousand Rockets old pattern…"
25	n.d.	?	? (salutation cut out)	2.5	Labeled in pencil in 19th cent. hand: "Mysterious letter from God knows who relating to the trial of Queen Charlotte."
26	n.d.	Congreve	?	1	"I have the pleasure to transmit to you the small volume …containing all the papers which I have from time to time printed on the Rocketry system."
27	n.d.	Congreve	Croker	2	"I have transmitted the letter you desired me to write—and beg of you that the request contained in it may be complied with…"
28	n.d. ("Dec. 20th")	?	Congreve	1	printed bill for Maidstone Grammar School with amounts filled in in ink
29	n.d.	ICMC?	?	3	unsigned incomplete draft
30	n.d.	ICMC?	? ("My Lord")	1	unsigned incomplete draft
31	n.d.	?	___	1	handwritten menu
32	n.d.	Congreve	Vivian	2 plus int. blank	"You are aware that His Majesty has given me a job in preparation of the Fireworks for his fete at Windsor…"
33	n.d.	[Congreve]—copy of a letter, in secretarial hand	Elliott	7	military matters
34	n.d. ("Wednesday night")	W. Knighton	Congreve	2 plus int. blank	business

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
35	"30 April"	Congreve	?	3	"I have the pleasure to send you the model of the 42 pd. cannonade & carriage…"
36	"mercredi 1 juillet"	?	Mme. West	4	letter in French
37	"le 2 août"	du Demain	? ("chère Madame")	4	social letter in French and English
38	Feb. 8, 1803	Wm. Congreve Sr. (Congreve's father)—LS in secretarial hand	Sir Joseph Banks	2.5	re his activities at the Royal Powder Mill & with artillery soldiers
39	n.d. (not before Dec. 8, 1806)	?	---	2 +	"Private Memo" re the royal family
40	May 14, 1807	? [illeg]	Congreve	1 plus int. blank	business
41	early Aug. – Oct. 1, 1807	Congreve	---	18	Congreve's diary of the Copenhagen bombardment and aftermath (incomplete)
42	Aug. 18. 1808	John Vivian	Congreve	2 plus integral address leaf	"As you requested me to inform you what took place about the R Stanney [?] artillery, I cannot conceal from you that all the Field Officers have resigned…"
43	n.d. (cover dated Xmas 1808)	?	Miss [Mary] Congreve (WC's aunt)	1.5, plus separate cover sheet	legal document containing instructions for probating a will
44	Feb. 17, 1809	Congreve Sr.	The Respective Officers of the Royal Powder Magazines near Hungerford	1 plus integral address leaf	re his plan to try a course of experiments
45	May 14, 1810	Charles H. Ware	Congreve	2 plus integral address leaf	re proving of a will
46	May 14, 1810	John Dowdeswell	---	3	legal opinion re proving of a will of which Mary Congreve was executrix

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
47	May 16, 1810	J. Sarum	Miss [Mary] Congreve	4 plus cover	re proving of a will
48	May 18, 1810	Congreve	Miss [Mary] Congreve	4 plus cover	C's advice to his aunt re proving a will
49	1810 (?)	Congreve	Miss [Mary] Congreve	4	"Your executorship will work out much better than we expected. The shares are two original or four modern ones worth £1055 each…"
50	Oct. 17, 1810	Congreve	J. W. Croker	3	"The gun carriages for sea service on the full scale … are now complete…"
51	n.d. [not before 1811]	?	---	1	pencil sketch of a suit of armor and shield
52	n.d. [1811]	[Congreve]	? ("My Lord") & Lord Liverpool	4 + 3-page signed copy of C's letter to Lord Liverpool	unsigned draft re C's being commissioned lieut. col. of the Hanoverian Artillery—discusses his rocketry work
53	May 6, 1813	Congreve	?	3	Requesting an official title, "which might place me decidedly within the pale of official communication & support."
54	Oct. 7, 1813	Congreve	Commissioners of the Navy	7	"Report of Col. Congreve … relative to his proceedings on the Rocket service from 1805 to 1813"
55	Oct. 21, 1813	Congreve	?	4	re his plan for arming a frigate "capable of firing two shot with the full charge of powder."
56	1813	Congreve (in secretarial hand)	---	7.5	"Colonel Congreve's statement relative to the Rocket service, from its commencement in 1805 to 1813"

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
57	Nov. 26, 1813	Congreve	?	4	rocketry—"Inclosed I send you this calculation as to the expense or, or rather the economy of the Rocket System…"
58	Jul. 8, 1814	Capt. John Hayes	Congreve	3	critique of Congreve's "Canonade Carriage" (weapon)
59	August 1814	Sunday Monitor	---	1	"The Pagoda, or Chinese Bridge…the whole completed under the superintendance of Sir William Congreve"—woodcut illustration
60	Jul. 29, 1814	Auguste, Prince de Prusse	Congreve	3	Letter in French re English artillery
61	Jan. 24, 1816	Congreve	?	8.5	re C's design for a wheel to move steam vessels—includes sketches
62	May 30, 1816	Congreve	Miss [Mary] Congreve	`1	business / financial matters—mentions a "Bill of £200 drawn by Dr. Darwin."
63	Feb. 18, 1817	Congreve	Croker	2	Asking for a pension for his friend Capt. Holland—postscript mentions C's work "in the mode of fitting the Bombships"
64	Oct. 5, 1817	Robert [illeg. last name]	Congreve	4	"I have the honour to acknowledge the receipt of your letter…wherein you mention the agreement of Lord Pembroke to an arrangement offered by you… for the removal of Cadet Schneider from the Regmt. under my command…"
65	Mar. 17, 1818	Congreve (in secretarial hand)	J. W. Croker	1.5	re Mr. Trengrouse's plan of "throwing lines by means of rockets in case of shipwreck."

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
66	n.d. (1818)	Congreve	J. Barrow	2.5	re Trengrouse's plan of "applying Rockets for throwing ropes ashore from shipwrecked vessels."
67	Dec. 28, 1818	Capt. John Wentworth Holland	Congreve	2 plus int. blank	re repayment of a loan he made to C
68	July 1821	Alexander Robertson	Congreve	1	bill for services—"Extra Hyde Part coronation account at the Serpentine river—Robertson Carpenter"
69	Mar. 21, 1822	Chevalier de Bury; Chevalier Abert	?	1 plus integral blank	legal document in French
70	Mar. 21, 1822	Chevalier de Bury; Chevalier Abert	?	1.5 plus integral blank	legal document in French
71	Mar. 21, 1822	Chevalier de Bury; Chevalier Abert	?	1 plus integral blank	legal document in French
72	Mar. 22, 1822	Chevalier de Bury; Chevalier Abert, etc.	?	2.5	legal document in French
73	Oct. 27, 1822	[Congreve]	? (ICMC?)	2	written oath
74	Apr. 10. n.d. (not before 1823)	Congreve	ICMC	7.5	love letter
75	Jan. 27, 1824	Hinrich & Stafford	Congreve	6.5	itemized bill for services
76	1824	Spooner & Co. / Congreve	Congreve	1	"Dr. Major General Sir William Congreve in acct. with Spooner & Co."—itemized bill. Memo initialed by Congreve in lower right corner.
77	May 19, 1824	Longman & Co.	---	1.5	"Memo respecting the publication of the Rocket Volume"

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78	Aug. 26, 1824	Congreve	Croker	1	accepting a summons to "meet Sir Robert Leppings re the subject of the new fitting of the Bombs."
79	1826	Thwartes & Read	Congreve	1	itemized bill for supplies
80	1826	Congreve (in secretarial hand)	John Hall	1.25	"Rocket accts."—itemized bill for supplies
81	Oct. 23, 1825	?	Congreve	4 (frag.; lower quarter of 2d leaf missing)	politics
82	Feb. 3, 1826	Congreve	ICMC	1 (frag.)	family matters
83	Apr. 10, 1826	Congreve	Attwood	2	unsigned draft—begging letter?
84	Apr. 24, 1826	R. F. Squires	Congreve	3 plus 2-page enclosure	urging C. to combat rumors re his ill health and his intention to resign his seat in Parliament
85	Aug. 6, [1827?] (date from postmark)	R. Drake	Congreve	1 (frag., last page of letter)	financial and business matters; mentions "Mrs. Carvalho" (C's mother-in-law?)
86	Jan. 27, 1827	R. Drake	Congreve	6 plus int. address leaf	financial and business matters—mentions the Arigna Mining Co., Congreve's "Work on Gunsights," C's rockets, dismissal of "Cann" by Mr. [Robert H.] Wade (purchaser of Congreve's rocket manufacturing firm)
87	Jan. 4, 1828	R. Drake	Congreve	4 plus cover postmarked Jan. 7, 1828	financial and business matters—mentions reprinting Congreve's work on gunsights at the request of the Duke of Clarence; selling furniture; leasing C's house in London

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88	Mar. 31, 1828	John Wenn, Notary Public	---	2	Engraved statement completed in ms. re non-payment of a promissory note
89	May 6, 1828	R. Drake	Congreve	6	financial and business matters—selling C's wine, reports of a committee authorized to report on C's gunsights and cannonade carriage
90	May 9, 1828	R. Drake	Congreve	11	financial and business matters—reprinting of C's "Rocket Work," extracts from the Articles of Agreement between C. and Wade, copy of a letter from Wade dated 3rd April 1828, copy of a letter from J. Dart of East India House dated 7 May 1828
91	n.d. [post May 15, 1828]	ICMC	?	1.5	pencil rough draft—re her "petition for remuneration for general services"
92	n.d. [post May 15, 1828]	ICMC	? ("My Lord")	2	pencil/ink rough draft—re "redemption of a promise made to my husband the late Sir W. Congreve"
93	n.d. [post May 15, 1828]	Fred. B. Watson	ICMC	2	insurance
94	n.d. [post May 15, 1828]	ICMC	either George IV or William IV	3.5	ICMC's petition to the King, asking that WC's pension be continued posthumously
95	n.d. [post May 15, 1828?]	ICMC	?	2 (frag.—2nd page crossed)	draft—business / financial
96	July 23, 1828	R. Drake	ICMC	7	the "Rocket business"; settling Congreve's post-mortem debts
97	Dec. 4, 1829 (postmark)	E. Huré (?)	ICMC	1 plus int. address leaf	In French—response to an invitation
98	May 10, 1831	Eliza Sharpin	ICMC	4	death of a relative

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99	Mar. 7, 1832	Dyneley, Coverdale & Lee	ICMC	2	"The parties are proceeding with their suit to impeach the settlement…"
100	August 1832	Dyneley, Coverdale & Lee	---	2	"Ex parte Sir William Congreve deceased. Statement of debts and probable assets."
101	Feb. 5, 1834	James Russell	?	2.5 (legal)	copy of "Query and Opinion" re creditors' lawsuits against Congreve's estate
102	May 1, 1835	?	G. C. Hawkins	1 (frag.)	financial matters
103	Apr. 14, 1836	Hammersley	ICMC	1 plus integral address leaf	dunning letter
104	June 2, 1836	ICMC	?	3	financial affairs
105	July 6, 1836	?	Miss Congreve	1	prescription (?) in Latin
106	May 17, 1837	A. De Binna	Chevalier de Ribeiro	1	bill for services rendered "in the matter of C. H. McEvoy, deceased"
107	Oct. 20, 1854	?	?	3	"The Daily News … Court Circular"
108	Sept. 12, 1855	"Demoiselle Marie"	C. G. Ferry	1.5	purchase of a garment
109	Oct. 14, 1856	"Mimi" (C's granddaughter?)	"John" (her cousin)	4 (crossed)	family matters
110	May 14, 1857	"Mimi"	"John"	3.5	family matters—ends with "Give my love to Isabella your mama…" (C had a daughter Isabella)
111	Feb. 22, 1858	George Carew	---	3 plus title page	legal document: "Mr. George Carew and Charles Fenton Whiting Esqr. Agreement for the sale and purchase of 9 Maida Hill West."
112	May 19, 1863	Sydney Cullendin	Miss Branbin (?)	1	making an appointment to "bring the ring."
113	July 8, 1868	Annie A. F. Heighams (?)	---	4	Last will and testament

NO.	DATE	AUTHOR	RECIPIENT	NO. PAGES	SUBJECT
114	Dec. 30, 1868	Col. Bergen-hous	Madame Augusta	4	letter in French discussing food
115	Jan. 8-9, 1869	?	Mme. West	cover	stamped and postmarked in both Marche and Ostende
116	Feb. 1, 1869	Lonnoy (?)	Mme. West	1.5	bill in French for "marchandises"