DESCRIPTION

OF THE

MACHINE

FOR THE

FIREWORKS,

With all its ORNAMENTS,

AND

A Detail of the MANNER in which they are to be exhibited in St. JAMES'S PARK, Thursday, April 27, 1749, on account of the

GENERAL PEACE,

Signed at Aix La Chapelle, October 7, 1748.



Published by Order of his MAJESTY'S Board of Ordnance.

LONDON,

Printed by W. Bowyer,

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[Price SIX PENCE.]

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Tower, April 21, 1749.

HE Publick is defired to take Notice, that Mess Gaetano Ruggieri and Joseph Sarti, only, are authorized by his Grace the Master General, the Lieutenant General, and Principal Officers of his Majesty's Ordnance, to publish the Description of the intended Fireworks.

By Order of the Board,

CHARLES BUSH.

By Virtue of the preceding Order, we have appointed William Bowyer to print the faid Description of the Fireworks, and him only: And whosoever else shall presume to print or abridge the same, shall be prosecuted according to Law.



GAETANO RUGGIERI, GIOSEPPE SARTI. A

DESCRIPTION

OF THE

MACHINE for the FIREWORKS, &c.

HE MACHINE is fituated 500 Feet from his MAJESTY'S Library, and represents a magnificent Doric Temple, from which extend two Wings terminated by Pavillons, as may particularly be seen by an accurate Plan and Elevation, published by the Consent of his Grace the Master General and the Right Honourable and Honourable the Principal Officers of his Majesty's Ordnance.

This Machine is 114 Feet high to the Top of his Majesty's Arms, and is 410 Feet long. It was invented and defigned by the Chevalier Servandoni, and all the Framing was performed by Mr. James Morris, Master Carpenter to the Office of Ordnance:

The ORNAMENTS of this Machine are all in Relief, and it is adorned with Frets, Gilding, Lustres, Artificial Flowers, Inscriptions, Statues, Allegorical Pictures, &c.

The Inscriptions are as follows:
On the Pedestal of Prace in the Center,
PAX. REDIVIVA.
AN. MDCCXLVIII.
Peace Restored in the Year 1748.

A 2

In

$\begin{bmatrix} 4 \end{bmatrix}$

In the Frieze over the Center Arch,

GEORGIVS: II: REX.

which appears transparent during the whole Performance of the Firework.

On the Right Side of the Machine,

REDINTEGRATA.

EVROPAE. PACE.

SECVRITATE. FOEDERVM.

STABILITA.

COMMERCIO.

FELICITER. RESTITVTO.

SVB. AVSPICIS. OPT. PRINC.

LAETATVR.

S. P. Q. B.

The Restoration of Peace to Europe, the Security of the Faith of Treaties, the happy Re-establishment of Commerce under the Auspices of the best of Kings, is the Joy of the British Senate and People.

On the Left-fide of the Machine,

HINC.

PRINCIPEM.

BELLO. ACCINGIT.

LIBERTATI. DEVOTA.

FORTITVDO.

ILLINC.

FACIFICVM. OSTENDIT.

SALVTI. OMNIVM.

CONSVLENS.

CLEMENTIA.

On one Hand Valour sacred to Liberty prepares the Prince for War. On the other, Clemency consulting the common Good shews him studious of Peace.

On the Attick in the Middle of the back Front,
GEORGIO. II. REGL OPT.
AVCTORI. SALVTIS.
LIBERTATIS. VINDICI.
FVNDATORI. QVIETIS.
PATRI. PATRIAE.

To the Guardian of our Safety, the Assertor of our Liberty, the Establisher of our Tranquillity, the Father of his People, George the Second.

The STATUES which adorn it are in Number twenty-three, viz.

On the first Half-pace of the great Stair-case on the Right-hand is the Figure of TAME; on the Lest Isis, each reclining on an Urn.

In the Center of the Temple, seated on an Altar, is the

GODDESS of PEACE,

holding an Olive-branch, and supported on the Right by NEPTUNE, on the Left by Mars. These five are cast in Plaister of *Paris*.

In the Front are four Statues, viz.

IVSTITIA. FORTITVDO. TEMPERANTIA. PRVDENTIA.

On

On the Right-end,

RELIGIO. CONSTANTIA.

On the Left-end,

HONOR. CLEMENTIA.

In the Back-front,

FIDES. VIGILANTIA.

On the Attick above the Cornice in the Front, IVPITER. CERES. DIANA. APOLLO.

In the Back-front, at the Angles, are, MERCYRIVS. MINERVA.

These Statues were all designed by Chevalier Andrea Cassali.

The PICTURES in the Front of the Machine are eighteen, each painted double: They at first appear as Marble Basso Relievos, and after the Firework is played off they are removed by Machinery, and discover Pictures representing the same Subject in Colours, which are rendered transparent by a great Number of Lampions.

The great Picture over the Cornice in the Center of the Machine is twenty-eight Feet by ten. It represents

His Majesty giving Peace to Britannia.

The Attendants on Peace, are Plenty, Riches, Felicity, Trade, and Commerce. The Attendants on Britannia are Liberty, Agriculture, and the Arts and Sciences.

On the Right of this, below the Entablature, is a Picture of fifteen Feet by eight, representing the Return

of NEPTUNE: He is riding on the Ocean in a Carr drawn by Sea-horfes: His Right-hand holds a Trident, and his Left supports a Globe: He is conducted by the Genius of Peace, and attended by Tritons, Sea-Nymphs, &c. Companion to this on the Left of the central Arch, is the Return of Mars: He is seated on a Carr drawn by three Lions, the Arms of England, and is conducted by Fame, with an Olive-branch, who proclaims the Peace. The Carr is followed by the Army. These three were designed by Chevalier Andrea Cassali.

On each Side of these two last Pictures is a Festoon of Arms and Military Instruments.

These with his MAJESTY'S Arms at Top, with the Trophies on each Side, and the Star of St. George and Star of St. Andrew, are the Performance of Monsieur Cleremont.

The Medaillon on the Right-hand is BRITANNIA joining Hands with FRANCE: The Legend, CONCORDIA. REDVX.

Exergue, BRIT. GALL.

Concord Renewed. Britain, France.

Below this is the Figure of Liberty. LIBERTAS.

On the Left is a Medaillon representing BRITANNIA joining Hand with SPAIN: the Legend,

SALVS. MVTVA.

Exergue, BRIT. HISP.

Mutual Benefit. Britain, Spain.

Below

Below this is the Figure of Plenty. COPIA.

These with the two Genii on each Side the central Arch are defigned by Signor Soldi.

The following Pictures are not rendered transparent, viz.

The Genii of Peace burning Heaps of Arms on each End of the Machine,

Which with the Medaillons, and painted Festoons within, are by Signor Soldi.

The Trophies of Arms at Top of the Back-front, by Mon-fieur Cleremont.

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DISPOSITION of the FIREWORK.

After a grand Overture of Warlike Instruments, composed by Mr. Handel, a Signal is given for the Commencement of the Firework, which opens by a Royal Salute of 101 Brass Ordnance of the following Natures, viz.

6 Pounders	-	-	71
12 Pounders	-	-	20
24 Pounders	•	-	10

The Salute ended, the Firework begins to display itfelf as follows:

I.

120 Large Honorary Rockets.

96 Rockets in two Flights.

12 Mortars

- 11 Mortars with Air Ballons.
- 12 Caduceus Rockets.
- 12 Girandole Rockets.

These fire together:

Two regulated Pieces, each confishing of Four Mutations, viz.

I. A large fixed Sun.

II. A Star of fix Points, and between each Point a Ray.

III. A Star of ten Points.

IV. A compound Figure confisting of Points and Rays.

Four large double Wheels moved by four Fires.

Twenty Tourbillons.

II.

- 120 Large Honorary Rockets.
 - 96 Rockets in two Flights.
 - 14 Mortars with Air Ballons.
 - 12 Caduceus Rockets.
 - 12 Girandole Rockets.

These fire together:

Two regulated Pieces confishing of vertical Motions communicating to fixed Fires, each having Four Mutations, &c.

I. A vertical Sun, which communicates to

II. A fixed Star of fix Points, with fix lucid Stars at the interior Points of the great Star.

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III. A

III. A large vertical Sun moved by double Fires, which communicates to

IV. A beautiful Figure composed of a great Number of brillant Stars.

Four large double Wheels moved by four Fires.

Twenty Tourbillons.

III,

120 Large Honorary Rockets.

192 Rockets in four Flights.

4 Mortars with Air Ballons.

12 Mortars with Air Ballons illuminated.

12 Caduceus Rockets.

12 Girandole Rockets.

These fire together:

Two regulated Pieces, each confisting of a large brillant Wheel, whose Center is composed of a steddy white Fire; from whence proceed six Archimedean Screws, that form as many Cones.—Above these are ten Wheels of Fruels, that turn vertically and horizontally, so as to form one vast Globe of Fire, on the Area of which are several small Globes of a very white Fire.

(Four large quadruple Wheels moved by eight Fires.

Twenty-four Tourbillons.

IV.

120 Large Honorary Rockets.

96 Rockets in two Flights.

406 Rockets in two Flights.

18 Mor-

- 18 Mortars with Air Ballons illuminated.
- 12 Caduceus Rockets.
- 12 Girandole Rockets.

To be fired together, Three regulated Pieces:

That in the Center is a Machine, from whence the Fire issues out, and retires within, twelve Times alternately. When without, it forms a Glory: when within, it composes a Star of eight Points, and then changes to a Royal brillant Wheel, whose Fire is thirty Feet in Diameter, and is moved by twelve Fires.

On each Side of this, is a Cascade of twenty-four Feet high, of three Mutations each, viz.

I. Four Falls of Fire of eight Feet each.

II. A magnificent Jet de feu of forty Feet high.

- III. A Pyramid of thirty Feet high, composed of Wheels with bright Planes in their Center, which terminate by projecting an hundred illuminated Globes from as many Pots de Brins.
- Mortar of nine Cylinders with one large Air Ballon in each.
- 600 Rockets in two Flights.

V.

141 Large Fountains, which form all the Outlines of the Machines, and play thirty Feet high; at the fame Time the Vales on the Pavillons appear in Fire. 400 Pots de Brins.

192 Rockets in four Flights.

VI.

68 Pyramids of brillant Fire, supporting fixed Suns of a red Fire, placed on the principal Lines of the Machine.

800 Pots de Brins.

192 Rockets in four Flights.

VII.

130 Pots d'Aigrettes with

- 260 Gerbes, which fire together and form semicircular Arcades with Jets rising between. These extend along the principal Lines of the Machine, and terminate with
- 130 Explosions of Serpents, Rains, and Stars.
- 1200 Pots de Brins.
 - 1 Mortar of nine Cylinders, with one large Air Ballon out of each.
 - 288 Rockets in fix Flights.

VIII.

- 24 Figured Pieces on the Terraces and Top of the Machine, viz.
 - 10 Stars of eight Points, with a fixed Sun with curved Rays behind it. These fire together, and afterwards communicate to
 - 10 Double Wheels.
 - 4 Pieces of a complicated form, confisting of diagonal Wheels, and vertical Globes.

2 Large

2 Large quadruple Wheels moved by fix Fires each.

4 Large double Wheels moved by four Fires, with Planes of bright Fire in their Center.

4 Single Wheels moved by one Fire, with bright Planes as before.

1600 Pots de Brins.

384Rockets in eight Flights.

IX.

19 Large Sheets of Fire from the principal Parts of the Machine, composed of Gerbes, and from each arises a large Fountain.

2000 Pots de Brins.

384 Rockets in eight Flights.

X.

100 Vertical Suns, that cover the Front of the Machine. 5000 Marrons in Battery, which continue firing to the End of the Fireworks.

2800 Pots de Brins.

1 Mortar of nine Cylinders, with one large Air Ballon out of each.

480 Rockets in ten Flights.

XI

These fire together:

The grand fixed SUN on the Top of the Machine, composed of three Circles of Rays, whose Diameter of Fire is seventy Feet. In its Center appears VIVAT. REX.

in bright Fire, and all its Rays terminate with Reports.

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On each Side of this, and firing at the same Time, three Circles of Rays; their Diameter of Fire will be fifty Feet each, and their Rays likewise terminate with Reports.

Behind the Statue of Prace a large Glory; and a figured Piece composed of Wheels, within the Apertures on each Side the Temple; with the

Cyphers of GR before them.

Two large Trees of Fire on each Terrace forty Feet high, which terminate with Reports; and on each Pavillon a Pyramid of Fire, composed of Gerbes forty Feet high. These terminate by Explosions of Stars, Rains, and Serpents from fifty Pots d'Aigrettes.

576 Rockets in twelve Flights. 3200 Pots de Brins.

XII.

A grand Girandole from the Top of the Machine, confisting of fix thousand Rockets headed with Stars, Rains, and Serpents, which form one Flight.

XIII.

The Machine becomes illuminated; the allegorical Pictures, which appeared in Basso Relievo, are removed by Machinery, and discover the same Subjects in transparent Colours, and the Area before the Machine is beautifully illuminated with Variety of Designs. These will continue burning a considerable Time.

An ABSTRACT of the Number of Pieces fired on this Occasion.

Sky-Rockets,				
. Honorary	_	•		482
Caduceus			-	48
Girandole	-		-	48
In Flights	-		•	10072
Total from 4 o	z. to	6 lb.	wt.	10650
Air Ballons	_		-	87
Tourbillons		-		88
Regulated Piece	ces		-	2,1
Figured Pieces		•	•	30
Pots d'Aigrette	es		-	180
Pots de Brins		-		12200
Cafcades	-		=	2 I
Vertical Suns a	and W	'heels		136
Fixed Suns			-	71
Fountains	-		-	160
Gerbes	-	_		260
Lances	-	~		3700
Marrons -	•	~	-	5000

WEIGHTS, &c. of the different Pieces.

The Honorary Rockets are of one, two, four, and fix Pounds Weight.

The Rockets for Flights are of a quarter, and half Pound.

The Caduceus Rockets are of two Pounds.

The Girandole Rockets are of two Pounds.

The

The large Fountains are of feven Pounds.

Cases for the great Sun, lesser Suns, and Trees of Fire, are of three Pounds.

All the Cases for the figured Pieces, Regulated Pieces, Cascades, Sheets of Fire, and Royal Wheels are of one Pound and half.

All the Cases for the other Wheels, Jets, Vertical Suns, fixed Suns, and Pyramids are of one Pound.

All the Cases for the Gerbes are of two Pounds.

Tourbillions are of two Pounds.

Air Ballons of five three Quarters, fix, and eight Inches Diameter.

Pots d'Aigrettes are of five Inches Diameter.

All the various Parts of this great Work are performed by the Direction of CHARLES FREDERICK Efq; Comptroller; and Capt. THOMAS DESAGULIERS, Chief Fire Master of His Majesty's Royal Laboratory.

The Fire, with its innumerable Communications, are executed by the Royal Train of Artillery, and the Signori GAETANO RUGGIERI, and GIUSEPPE SARTI of Bologna.



