

**Specification of Jean Frederic Marquis de Chabannes : apparatus for consuming smoke and warming apartments.**

**Contributors**

Chabannes, Jean-Frédéric de, marquis de Curton, 1762-1836.

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A.D. 1815 . . . . . N° 3875.

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S P E C I F I C A T I O N

OF

JEAN FREDERIC MARQUIS DE CHABANNES.

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APPARATUS FOR CONSUMING SMOKE  
AND WARMING APARTMENTS.

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L O N D O N :

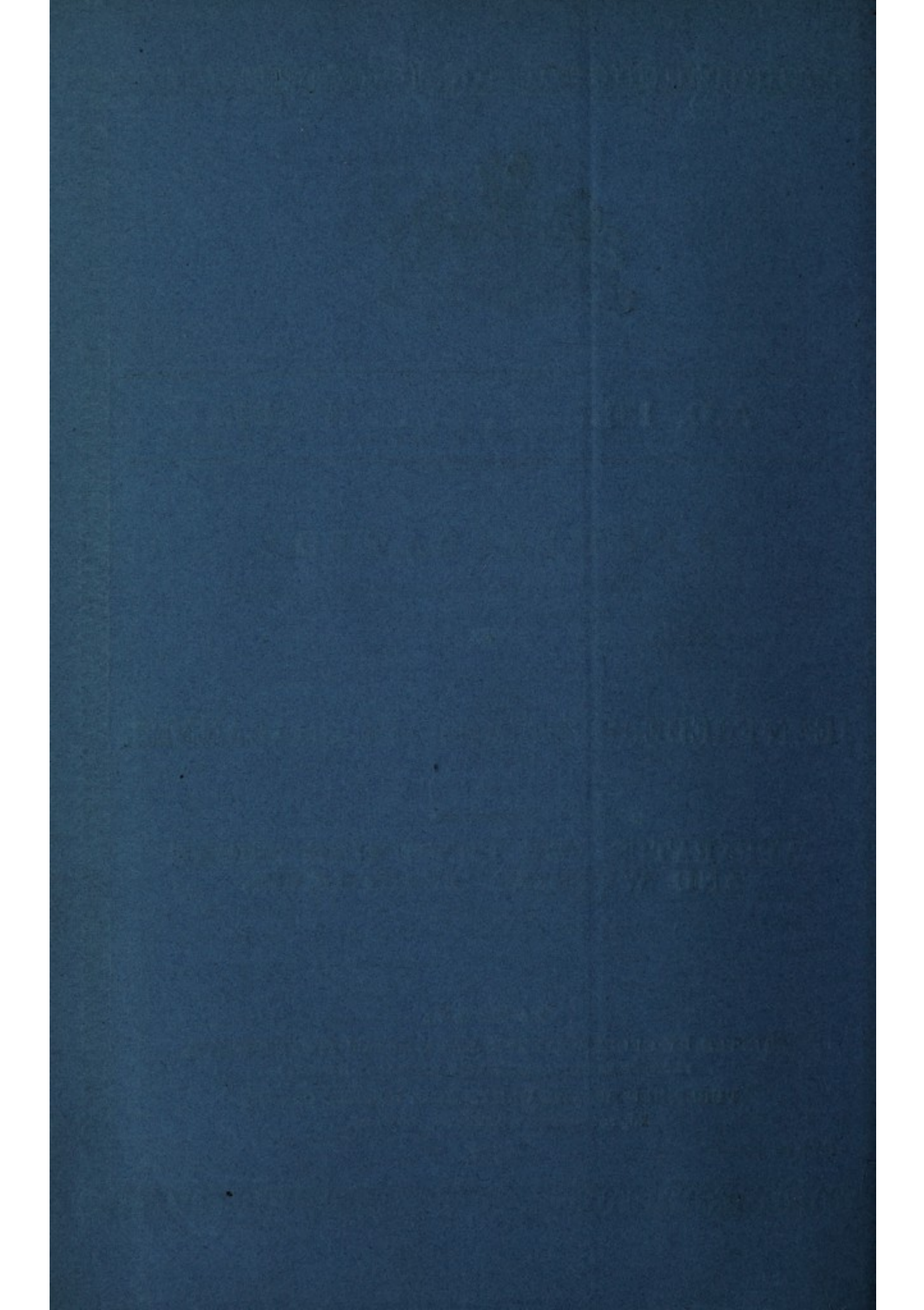
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1854.









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A.D. 1815 . . . . . N° 3875.

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Apparatus for Consuming Smoke and Warming  
Apartments.

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DE CHABANNES' SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JEAN  
FREDERIC Marquis DE CHABANNES, send greeting.

WHEREAS His present most Excellent Majesty King George the Third,  
did, by His Royal Letters Patent under the Great Seal of the United  
5 Kingdom of Great Britain and Ireland, bearing date at Westminster, the  
Sixteenth day of January, in the fifty-fifth year of His reign, give and grant  
unto me, the said Jean Frederic Marquis de Chabannes, my executors,  
administrators, and assigns, His especial licence, full power, sole privilege, and  
authority, that I, the said Jean Frederic Marquis de Chabannes, my executors,  
10 administrators, and assigns, during the term of years therein expressed, should  
and lawfully might make, use, exercise, and vend my Invention of "A NEW  
METHOD OF EXTRACTING FROM FUEL A GREATER QUANTITY OF CALORIC THAN HATH  
HITHERTO BEEN ACQUIRED, AND APPLYING IT TO THE PURPOSE OF WARMING THE  
ROOM IN WHICH THE OPERATION IS CONDUCTED, AND ALSO OTHER ROOMS, BY ONE SINGLE  
15 FIRE," within that part of the said United Kingdom called England, the  
Dominion of Wales, and Town of Berwick upon Tweed, and the Colonies and  
Plantations abroad, in such manner as to me, the said Jean Frederic Marquis  
de Chabannes, my executors, administrators, and assigns, should in our  
discretion seem meet; in which said Letters Patent is contained a proviso  
20 that if I, the said Jean Frederic Marquis de Chabannes, should not parti-  
cularly describe and ascertain the nature of my said Invention, and in what  
manner the same is to be performed, by an instrument in writing under my  
hand and seal, and cause the same to be inrolled in His Majesty's High



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Court of Chancery within six calendar months next and immediately after the date of the said Letters Patent, relation being thereunto had, may more fully and at large appear.

**NOW KNOW YE**, that in compliance with the said proviso, I, the said Jean Frederic Marquis de Chabannes, do hereby declare that my said Invention 5 consists of three principles, which may be employed either united or separately :

The first principle is the surrounding (either wholly or in part) an open fire-place or fire-places of any description with hollow air pipes of metal, earth, or any other substance or material applicable to the purpose, made in any form and placed in any direction so that the heat and smoke may act on a great surface. 10 The second principle is the burning all or chief part of the smoke by causing it to pass thro' the fire as it proceeds from the coals as they coke in the box (shewn in Fig. 1), which in its passage thro' the fire becomes converted into flame. The third principle is retaining the heat or preventing its ascending with too much rapidity by multiplying the air pipes and placing 15 them so as to attract all the heat before it reaches the top of the chimney, by which means and by the use of valves, shutters, or dampers, as hereafter described, all the rooms up to and including the attics or any separate room or rooms may be heated according to the wish or desire of the parties.

The annexed Drawing and the following explanation of the different parts 20 will tend more fully to explain my Invention :—Fig. 1 represents a calorifere fumivore applicable to the warming of a single room, in which A is the box which contains the coals or other fuel, which are put therein by taking off the cover F, which should be made to fit air-tight ; b, the fire box, made of cast iron or other suitable metal or material ; C, C, pipes of cast iron, earth, or other 25 metal or material applicable to the purpose, which are open at each end and surround the fire box. The flame escapes at the opening d, d, and passing round the pipes to get to the flue heats the air as it goes thro' them. e represents an opening to admit the atmospheric air, and for lighting the fire. The square Figure circumflexed to the above represents the bottom of the above- 30 described Figure, in which the letters represent the openings of the air pipes C ; b, the grating at the bottom of the fire box ; and d, the openings for the flame to escape. Figure 2 represents a calorifere fumivore adapted to the heating of several rooms. The fire-place A is placed in the kitchen or lowest room intended to be warmed by it, and its flue runs to the top of the house or highest 35 room intended to be warmed, and in the fire-place in each room intended to be warmed is to be placed a box of air pipes communicating with the principal flue ; or if stoves are already fixed in the fire-places, and it is not wished to derange them, a box of air pipes may be placed on one side of the fire-place, as



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represented in Fig. 3 and 4, or on both sides, and made to communicate with the principal flue by two elbows B, B, between which elbows in the flue is placed a damper or valve C to prevent the heat ascending the flue, by which means it enters the box at the bottom elbow, and after passing round the  
5 pipes it goes out at the top elbow into the flue. If it is intended to warm an upper room, and not the room or rooms under it, by opening the damper or valve the heat will ascend to the upper room. The damper or valve may be opened by a handle, as shewn in Fig. 4, or by a register or any other means that may be agreeable. The boxes of air pipes may be concealed by any  
10 ornamental work that may be agreeable to fancy, care being taken that sufficient room is left at the bottom for the cold air to enter, and at the top for the warm or heated air to escape into the room, and in such covering there should be left openings with doors, shutters, or covers, for the purpose of being able to clean out the dust or other matter that may form round the pipes and obstruct the  
15 passage of the hot air round them; four covers for that purpose are represented at D, D, D, D, in Fig. 4. Fig. 3 is a section for the purpose of shewing the air pipes and the damper or valve. Fig. 5 represents a method of heating large rooms or warehouses where there is no flue or chimney, and where the heat can be supplied by a pipe going up from any fire-place in the lower part  
20 of the house to the room or rooms intended to be warmed; one, two, or more cylindrical or other shaped box or boxes containing air pipes, and furnished with shoulders and dampers or valves, as before described, may be placed in each story, which will take very little room, and give as much heat as the method described in Fig. 2, 3, and 4. Fig. 6 represents a hot air stove to be  
25 used in lieu of the register or other stoves now in use, and which gives more heat and burns less fuel. A is a front view, shewing the air pipes at the back. B is a side view of the pipes, shewing the communication with the chimney or flue for the smoke to escape at the upper part; and C is a view of the bottom, shewing the openings of the air pipes. This stove is fixed projecting a little  
30 into the room, and the chimney carefully closed, which causes the cold air to enter into the bottom of the pipes, and becoming warmed in its progress through them, comes out at the top, diffusing a gentle and agreeable heat, and without burning or destroying the elasticity of the air. Fig. 7, A represents a calorifere fumivore applied to serve as a kitchen stove, in which the front may  
35 be used for roasting, or for the portable kitchen hereafter described, and by the air pipes placed around, the heat may be applied to the various other purposes of cooking. B represents the bottom. Fig. 10 is a front view of a portable kitchen or cooking apparatus made of tin or other suitable material, which may be applied to the front of Fig. 7 or any other fire-place for the purpose of



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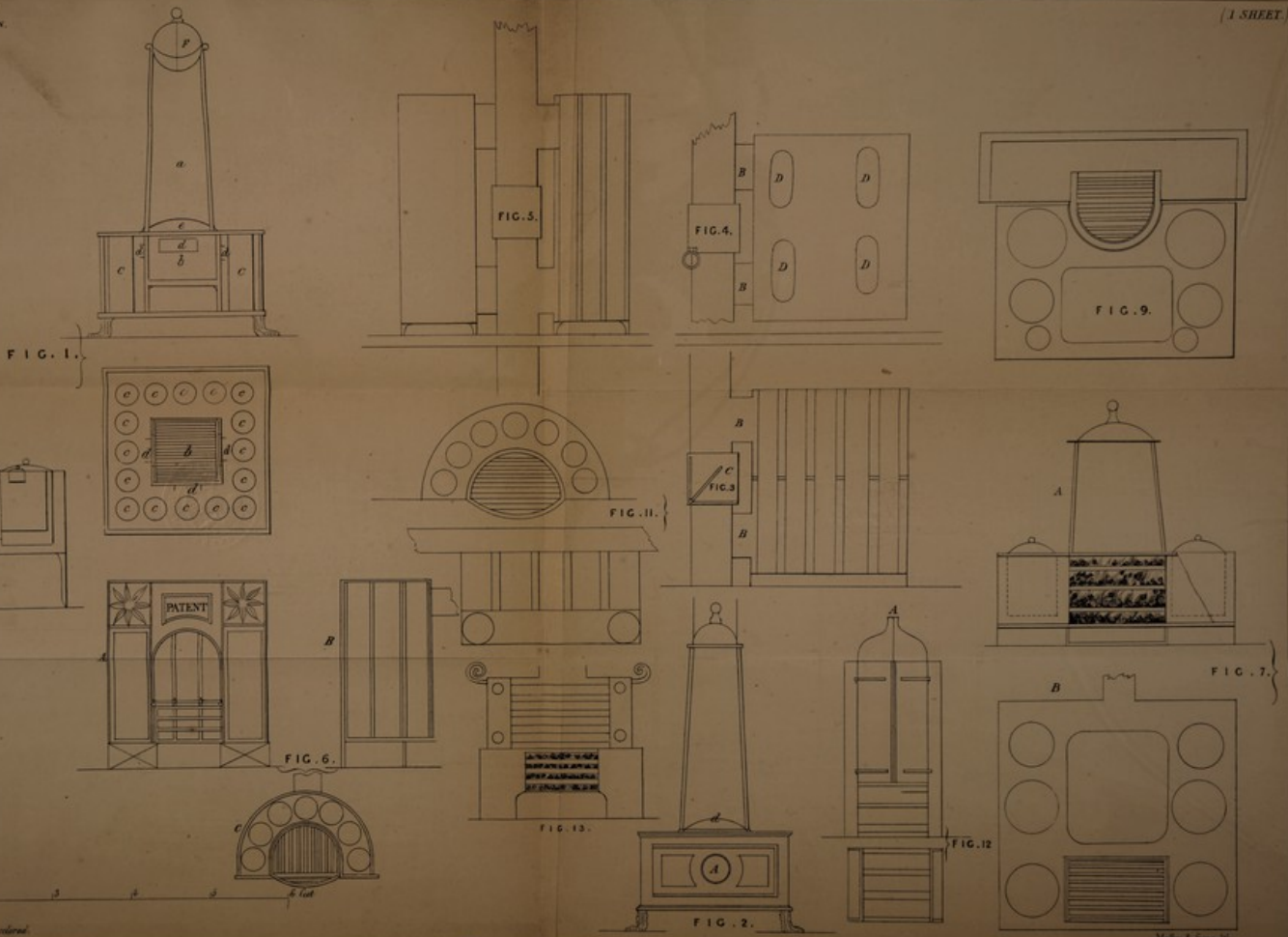
cooking, and which may be taken away when the cooking is over. Fig. 9 represents the bottom of the range in the portable kitchen, and shews how the portable kitchen is to be applied to the fire-place. Fig. 11 is a cradle of hot air pipes, made of cast iron, earth, or any other suitable material, and which may be adapted to any register stove in the manner most suitable to the situation 5 in which the stove is fixed. These pipes may be made in any shape or form, and placed in any direction, so that there be openings at the bottom for the cold air to enter, and at the top for the air to come into the room after being warmed in its passage thro' the pipes, which pipes should pass thro' or be in contact with the fire in the stove. Fig. 12 represents a box of cast 10 iron or other suitable metal or material filled with air pipes, to be fixed at the back of a common kitchen range, without changing the usual method of cooking; by these pipes the heat may be conveyed to all the rooms above without using any additional fuel. This box being placed at the back of the range, an opening is to be left in the front for the smoke to pass up when the damper or valve is 15 closed, and it should be constructed with doors or flaps for the purpose of getting at the pipes to clean away any obstruction by soot or otherwise. When the heat is not wanted in any room except the kitchen, the damper or valve placed at A is to be shut, which will cause the smoke and heat to ascend by the opening in the chimney in front of the box. Fig. 13 represents a portable warmer, 20 which may be used with any common grate, when it is wished to have a greater degree of heat in the room than would be given by the fire in the usual way. This portable warmer consists of a set of pipes fixed in a frame to correspond with the size of the fire-place, having holes at the bottom for admitting the cold air, dampers or valves above them for the purpose of forcing the air into the 25 pipes, and holes at the top to let the warm air into the room, and when the room is sufficiently warm this portable warmer may be taken off and carried away. This warmer is here represented without its front covering for the purpose of shewing the pipes, but it must be closed on all sides, forming a box.

Having thus, by way of elucidation, shewn several ways in which it appears 30 to me that this Invention may be applied with advantage, I do hereby declare, that I do not mean to confine myself to the exact form or shape of any of the parts before described, or to the materials of which the same are mentioned to be composed or made, but claim every means of warming rooms by the introduction of its heated in its passage thro' pipes in contact with fire. 35

In witness whereof, I, the said Jean Frederic Marquis de Chabannes, have hereunto set my hand and seal, this Fifteenth day of July, in the year of our Lord One thousand eight hundred and fifteen.

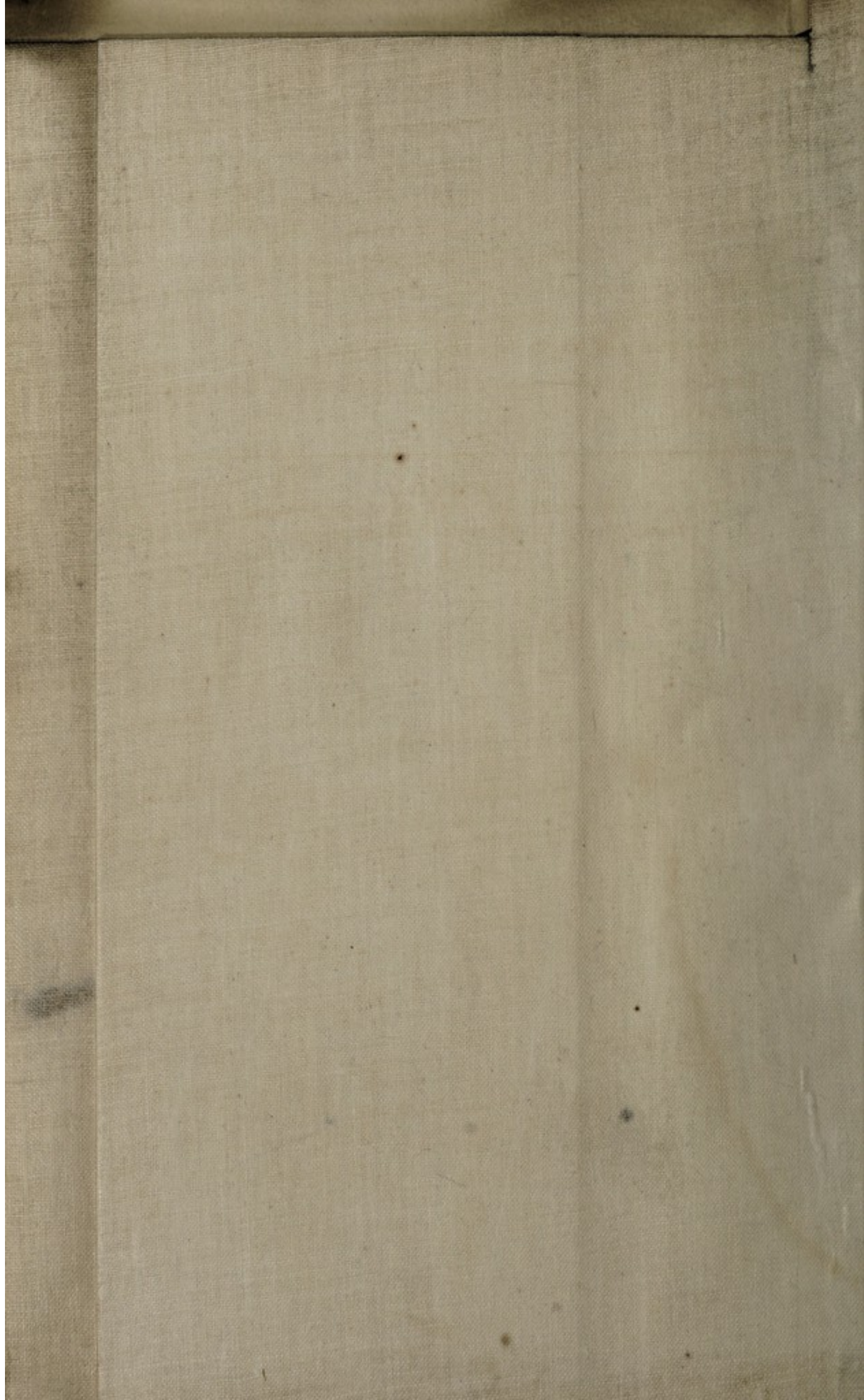
(L.S.) CHABANNES.





The enrolled drawing is partly colored.







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AND BE IT REMEMBERED, that on the Fifteenth day of July, in the fifty-fifth year of the reign of His Majesty King George the Third, the said Jean Frederic Marquis de Chabannes came before our said Lord the King, in His Chancery, and acknowledged the instrument aforesaid, and all and every-  
5 thing therein contained and specified, in form above written. And also the instrument aforesaid was stamped according to the tenor of the Statute made in the forty-eighth year of His said Majesty's reign.

Inrolled the Fifteenth day of July, One thousand eight hundred and fifteen.

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