

# **Specification of Barthelemy Louis François Xavier Fléchelle : litter and bed for invalids.**

## **Contributors**

Fléchelle, Barthelemy Louis François Xavier.

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A.D. 1853 . . . . . N° 1826.

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

OF

BARTHELEMY LOUIS FRANCOIS XAVIER  
/  
FLECHELLE.

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LITTER AND BED FOR INVALIDS.

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L O N D O N :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOOD<sup>ES</sup>,  
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY :

PUBLISHED AT THE QUEEN'S PRINTING OFFICE, EAST HARDING STREET,  
NEAR FLEET STREET

*Price 8½d.*

1854.



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A.D. 1853 . . . . . N° 1826.

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**Litter and Bed for Invalids.**

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**LETTERS PATENT** to Barthelemy Louis François Xavier Fléchelle, Gentleman, of Paris, in the French Empire, for the Invention of "CERTAIN IMPROVEMENTS IN THE MEANS OF CARRYING, BEDDING, AND BATHING THE INJURED, ILL, OR INVALID PERSONS."

Sealed the 27th January 1854, and dated the 4th August 1853.

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**PROVISIONAL SPECIFICATION** left by the said Barthelemy Louis François Xavier Fléchelle at the Office of the Commissioners of Patents, with his Petition, on the 4th August 1853.

I, BARTHELEMY LOUIS FRANÇOIS XAVIER FLÉCHELLE, Gentleman, of  
5 Paris, in the French Empire, do hereby declare that the nature of my  
Invention for "CERTAIN IMPROVEMENTS IN THE MEANS OF CARRYING,  
BEDDING, AND BATHING THE INJURED, ILL, OR INVALID PERSONS," to be as  
follows:—

My improvements consists of a litter for carrying wounded or sick  
10 persons, which consists of an iron frame capable of folding in the  
center of its length, and also jointed so as to be capable of being  
separated into two parts in the direction of its breadth; it has at  
each corner a handle by which it is carried, and which, when the letter



*Fléchelle's Improvements in Carrying, Bedding, & Bathing Invalids.*

is placed on the ground, turn down and form legs. On this frame is placed a mattress, also capable of being divided into two parts longitudinally. From this litter the patient is transferred to a bed suitable for performing operations, if necessary, which is so arranged as to allow a part to slide out from the center of the bed so as to permit the operator to advance towards the center of the bed when necessary; this bed is also arranged so as to be capable of being set at any required inclination. Should it be necessary to administer a bath to the patient he is slid from the litter on to a strained web, which by means of a pair of winches, one at each end, is lowered into the bath underneath.

**SPECIFICATION** in pursuance of the conditions of the Letters Patent, filed by the said Barthelemy Louis François Xavier Fléchelle in the Great Seal Patent Office, on the 3rd February 1854.

**TO ALL TO WHOM THESE PRESENTS SHALL COME, I, 15**  
**BARTHELEMY LOUIS FRANÇOIS XAVIER FLÉCHELLE**, Gentleman, of Paris, in the French Empire, send greeting.

**WHEREAS** Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Fourth day of August, in the year of our Lord One thousand eight hundred and fifty-three, in the seventeenth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Barthelemy Louis François Xavier Fléchelle, Her special licence that I, the said Barthelemy Louis François Xavier Fléchelle, my executors, administrators, and assigns, or such others as I, the said Barthelemy Louis François Xavier Fléchelle, 25 my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for 30  
**"CERTAIN IMPROVEMENTS IN THE MEANS OF CARRYING, BEDDING, AND BATHING THE INJURED, ILL, OR INVALID PERSONS,"** upon the condition (amongst others) that I, the said Barthelemy Louis François Xavier



*Fléchelle's Improvements in Carrying, Bedding, & Bathing Invalids.*

Fléchelle, by an instrument in writing under my hand and seal, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months  
5 next and immediately after the date of the said Letters Patent.

**NOW KNOW YE**, that I, the said Barthelemy Louis Francois Xavier Fléchelle, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof  
10 (that is to say):

The first part of my Invention consists of a litter for carrying wounded or sick persons, which is constructed of an iron frame capable of folding in the centre of its length, and also jointed so as to be capable of being folded or separated into two parts in the direction  
15 of its breadth; it has at each corner a handle by which it is carried, and which, when the litter is placed on the ground, turn down and form legs. On this frame is placed a mattress, also capable of being divided into two parts longitudinally.

Figure 1, of the annexed Drawing represents the litter when folded;  
20 and Figure 2, represents the same litter when opened for use; Figure 3, is a plan view; and Figure 4, shows the manner in which the litter can be divided longitudinally. It is composed of two similar parts or frames *a, a, b, b*, which can be connected together or separated at pleasure. The feet *c*, are jointed to the frame, and can be converted into  
25 handles for carrying the litter for detaching the supports *d*. Springs *f*, are provided at the hinges so as to avoid all shock in carrying. At the head of the litter is a frame *e*, to support the back and head, which can be set to any required angle. Two pieces *g, g*, are provided, one on each side of the litter, and which turn on centres at the head end,  
30 so that they can be raised into the position shown in Figure 2, when required to support a curtain. A band *i*, holds together the two parts of the litter, which are pin-jointed the one to the other at *j, j*, and are each covered with a linen fabric. Figures 6, 7, and 8, represent the mattress and pillow to be used with the litter. The mattress is com-  
35 posed of two parts *s*, and *u*, which are connected together by a flap and



*Fléchelle's Improvements in Carrying, Bedding, & Bathing Invalids.*

buttons at *t*. The pillow *y*, is similarly constructed. In the use of this litter the sick person can be transferred from the litter to a bed without being in any way disturbed. The litter is placed on the bed, and together with the mattress is divided into two parts in the centre, one of which is removed on each side, and the sick person is gently 5 slid on to the bed. It also has the advantage of occupying less space than an ordinary litter when out of use.

The second part of the Invention consists of a bed suitable for performing medical or surgical operations, and which is so arranged as to allow a part to slide out from the centre so as to permit the operator 10 to advance towards the centre of the bed when necessary. The bed is also arranged so as to be capable of being set at any required inclination.

Figure 5, shows a perspective view of this apparatus, which receives a mattress divided into two parts, as is the case with the litter before 15 described. The sides *k*, of the bed hinge at *z*, which, when the cross piece *s*, is removed, permit the two parts *k*, at the end of the bed to be separated from one another; then the operator in drawing out the slide *j*<sup>2</sup>, can advance into the middle of the bed, and there perform any necessary operation. The bed turns on the centre *o*, so that it can be 20 adjusted to any inclination by means of the handle *p*, and a pinion working into the carved rack *q*; when the required inclination is obtained it is made fast by a pin passing through the arm *r*. *l*, *l*<sup>1</sup>, are the rests for the hands of the person operated on. *m*, *m*<sup>1</sup>, and *n*, *n*<sup>1</sup>, are rests for the hands and feet respectively. 25

It will be seen that the divided mattress permits the changing of the sheets, &c. without removing the patient from the bed.

The third part of my Invention consists in the arrangement of a bath for sick persons. The patient is slid from the litter or in any other manner placed on to a strained web, which by means of a pair 30 of winches, one at each end, is lowered into the bath underneath. A perspective view of this arrangement is shewn at Figure 9. The sick person is placed on the surface *f*<sup>1</sup>, which may be of woollen or other fabric strained on a wooden frame, and in which are holes *g*<sup>1</sup>; this surface is suspended at the ends by pieces of fabric *e*<sup>1</sup>, which, when the 35



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*Fléchelle's Improvements in Carrying, Bedding, & Bathing Invalids.*

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handles  $d^1$ , are turned, unroll from the rollers  $c^1$ , which are carried by the supports  $b^1$ , and lower the patient into the water contained in the bath  $a^1$ , underneath.

Having thus described the nature of my Invention, and the manner  
5 of performing the same, I would have it understood that I do not confine myself to the exact details described; but what I claim is, the peculiar arrangement of litter, bed, bath, and mattress herein-before described.

In witness whereof, I, the said Barthelemy Louis Francois Xavier  
10 Fléchelle, have hereunto set my hand and seal, this Thirtieth day of January, in the year of our Lord One thousand eight hundred and fifty-four.

B. L. F. X. B<sup>MY</sup> FLÉCHELLE. (L.S.)

Witness,

15 C<sup>te</sup> DU VIGIER,  
Rue du Froudeure, 6, (Paris).

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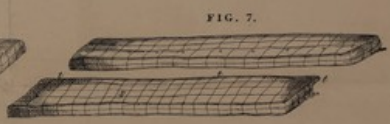
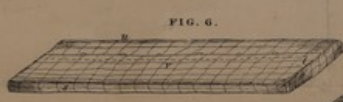
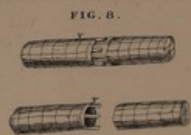
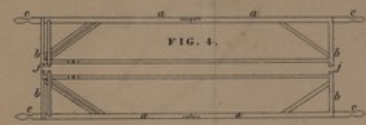
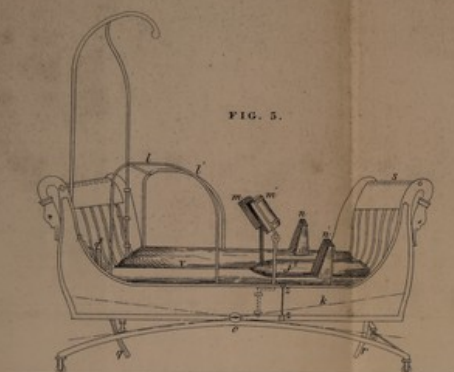
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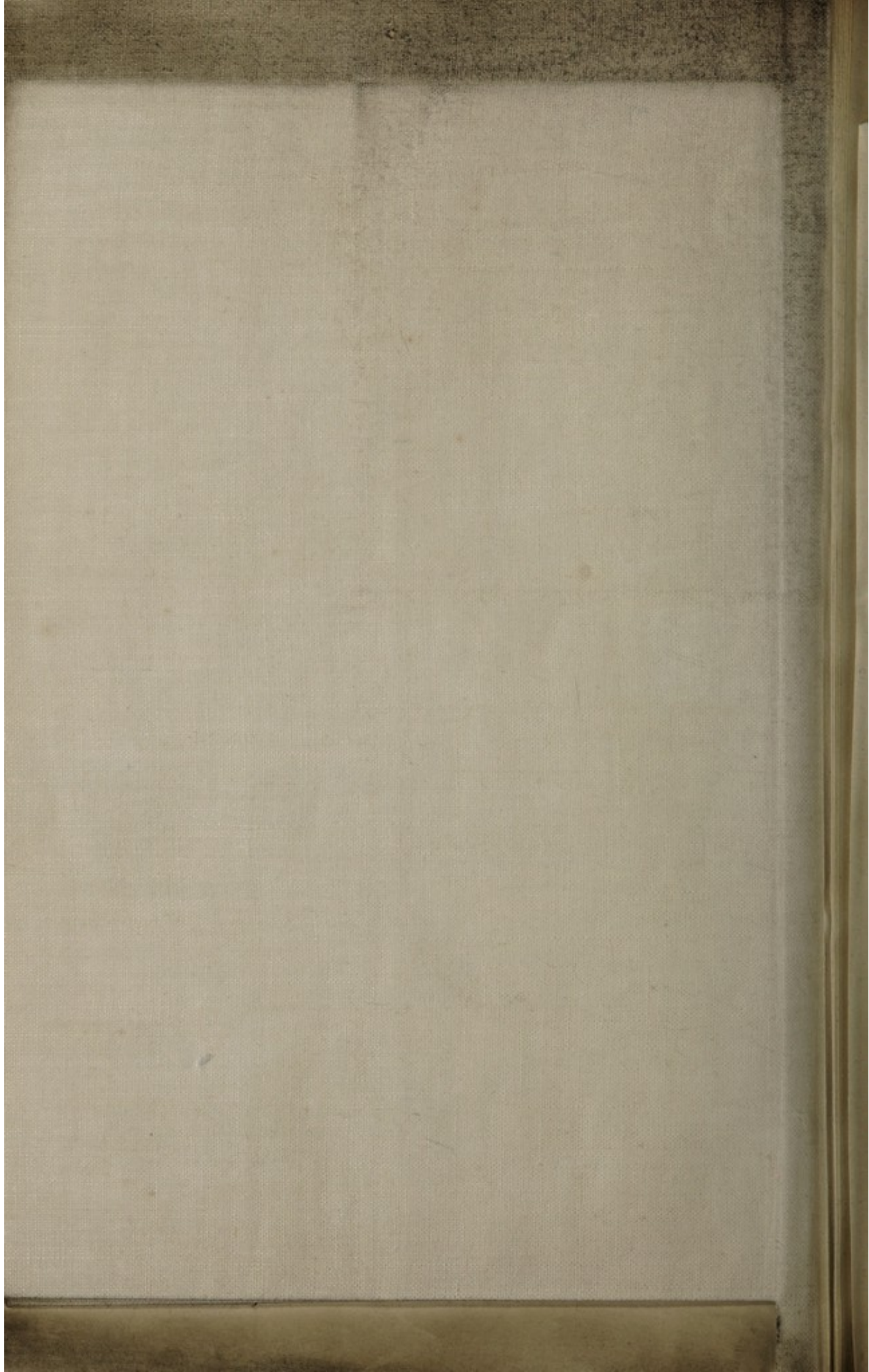


The filed drawing is partly colored.

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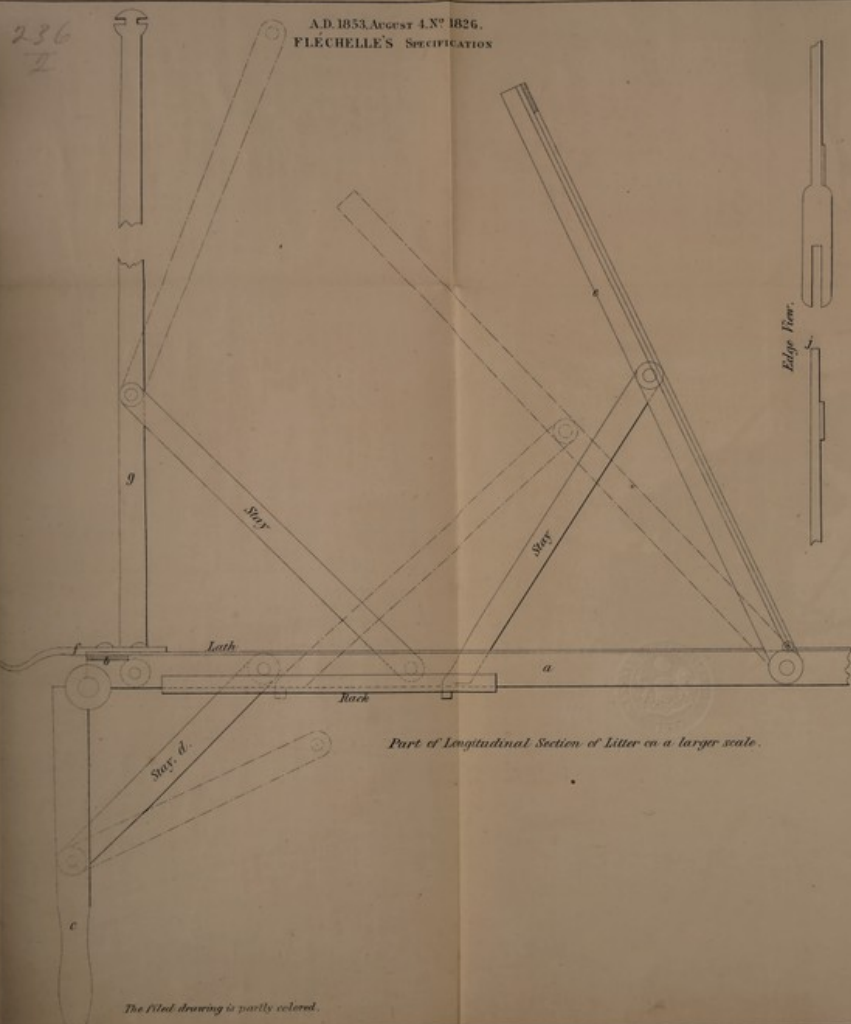




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A.D. 1853, AUGUST 4, N° 1826.  
FLECHELLE'S SPECIFICATION

( 2 Sheets )



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