

Specification of Robert Blackbee : surgical instruments.

Contributors

Blackbee, Robert.

Publication/Creation

London : Great Seal Patent Office, 1870 (London : George E. Eyre and William Spottiswoode)

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A.D. 1870, 14th JUNE. N° 1700.

SPECIFICATION

OF

ROBERT BLACKBEE.

SURGICAL INSTRUMENTS.

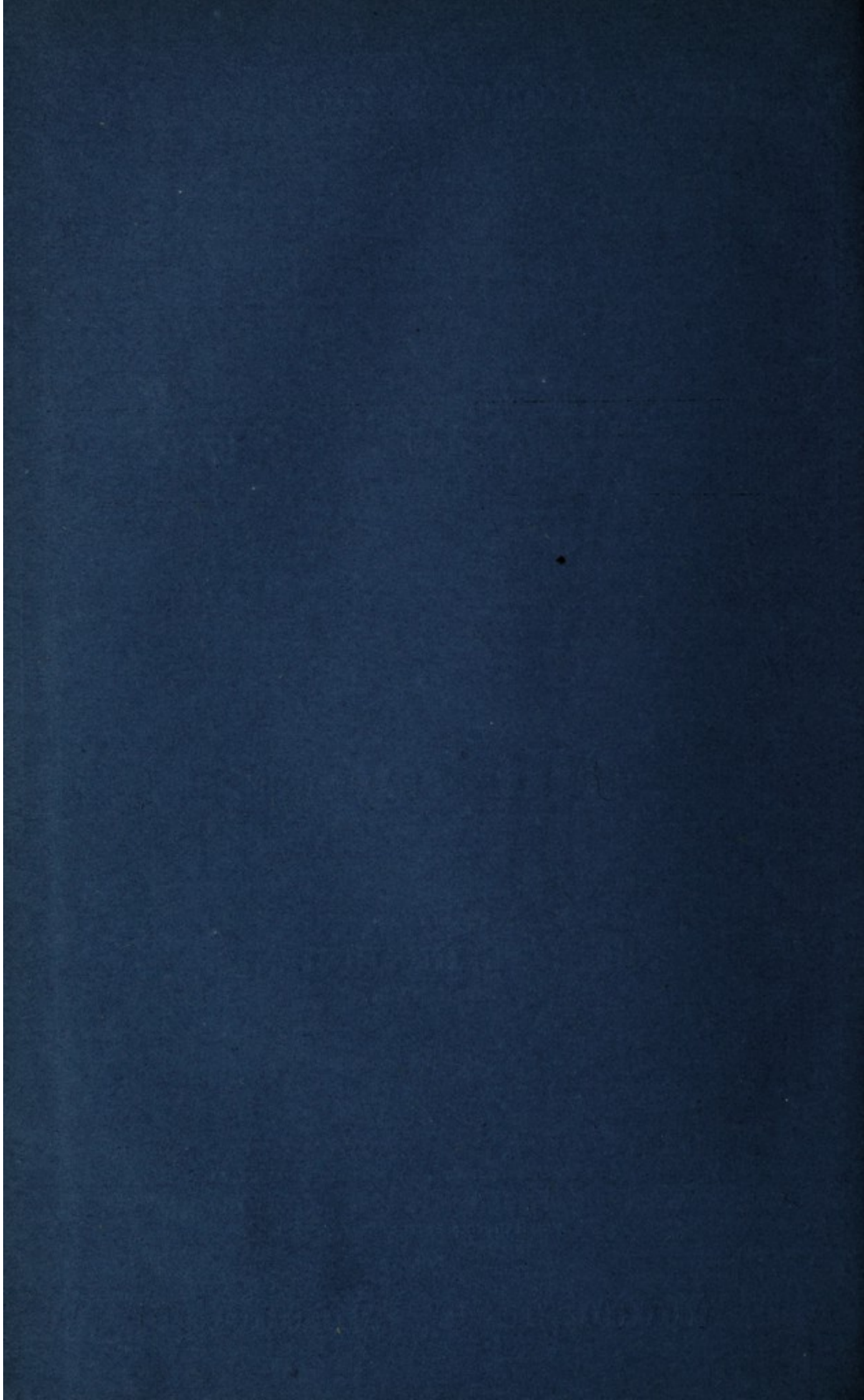
LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,
25, SOUTHAMPTON BUILDINGS, HOLBORN.

Price 8d.

1870.





A.D. 1870, 14th JUNE. N° 1700.

Surgical Instruments.

LETTERS PATENT to Robert Blackbee, of Dalston, in the County of Middlesex, for the Invention of "IMPROVEMENTS IN THE CONSTRUCTION OF SURGICAL INSTRUMENTS KNOWN AS 'SPECULA.'"

Sealed the 13th December 1870, and dated the 14th June 1870.

PROVISIONAL SPECIFICATION left by the said Robert Blackbee at the Office of the Commissioners of Patents, with his Petition, on the 14th June 1870.

I, ROBERT BLACKBEE, of Dalston, in the County of Middlesex, do
5 hereby declare the nature of the said Invention for "IMPROVEMENTS IN
THE CONSTRUCTION OF SURGICAL INSTRUMENTS KNOWN AS 'SPECULA,'" to be as
follows:—

This Invention consists of a skeleton speculum formed of German
silver wire in such a manner that when introduced into the vagina by its
10 own resiliency it affords an uninterrupted view of the whole of the parts
to be examined. The following is an example of the construction of
the specula above referred to:—I shape a certain length of hard drawn
German silver wire in such a manner as to form a skeleton speculum
consisting of two pairs of blades, namely, the one pair lateral, and the

Blackbee's Improvements in Surgical Instruments termed Specula.

other pair, one of which is superior and the other inferior, which two pairs of blades, with the exception of certain curves, or in a line parallel to each other.

This formation refers to the anterior position of the instrument, posteriorly the four blades from the peculiar construction of the instru- 5
ment are parallel transversely, thus there are two superior and two inferior blades set at such an angle to each other as to form the skeleton of an octagonal tube.

Anteriorly the termination of the lateral pair of blades are bent at a certain distance from the posterior end of the instrument so as to form 10
a notch or shoulder, which when the speculum is fairly introduced into the vagina shall by its own resiliency spring into the foramina ovalia, and thus retain its position, and these blades having a greater length of wire than the other blades are extended beyond the shoulder or notch
into a circular form so as to answer the purpose of a pair of handles, which 15
when pressed together by the thumb and index finger (the anterior end of the superior and inferior blades being first brought within them) separates the four blades of the speculum, thus giving a clear and uninterrupted view of the entire length of the vaginal passage up to the
os uteri. 20

Posteriorly the blades have a circular termination and are set outwardly, thus giving a greater power of separation and at the same time a steady retention of the instrument in the vaginal passage.

The anterior termination of the four blades are curved outwards so as to separate the labiæ completely in every direction, the inferior blade is 25
curved at its anterior termination so as to repress the os coccygis when needful.

One pair of the posterior transverse lateral blades is made shorter than the other pair, so that the other or longer pair of transverse blades may overlap or be included in each other, thus compressing the 30
posterior ends of the four blades into such a space as may be introduced into the vagina without inconvenience to the patient.

Blackbee's Improvements in Surgical Instruments termed Specula.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Robert Blackbee in the Great Seal Patent Office on the 14th December 1870.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ROBERT
5 **BLACKBEE**, of Dalston, in the County of Middlesex, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Fourteenth day of June, in the year of our Lord One thousand eight hundred and seventy, in the thirty-third year of Her reign, did, for Herself, Her heirs and successors, give and
10 grant unto me, the said Robert Blackbee, Her special licence, that I, the said Robert Blackbee, my executors, administrators, and assigns, or such others as I, the said Robert Blackbee, 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,
15 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 "**IMPROVEMENTS IN THE CONSTRUCTION OF SURGICAL INSTRUMENTS KNOWN AS SPECULA**," upon the condition (amongst others) that I, the said Robert Blackbee, my executors or administrators,
20 by an instrument in writing under my, or their, or one of their hands and seals, 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 next and immediately after the date of the said
25 Letters Patent.

NOW KNOW YE, that I, the said Robert Blackbee, 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, that is to say:—

30 This Invention consists of a skeleton speculum formed of German silver wire in such a manner that when introduced into the vagina by its own resiliency it affords an uninterrupted view of the whole of the parts to be examined. The following is an example of the construction of the specula above referred to:—I shape a certain length of hard drawn
35 German silver wire in such a manner as to form a skeleton speculum consisting of two pairs of blades, namely, the one pair lateral, and the other pair, one of which is superior and the other inferior, which two

Blackbee's Improvements in Surgical Instruments termed Specula.

pair of blades, with the exception of certain curves, are in a line parallel to each other.

This formation refers to the anterior portion of the instrument, posteriorly the four blades from the peculiar construction of the instrument are parallel transversely, thus there are two superior and two inferior 5 blades set at such an angle to each other as to form the skeleton of an octagonal tube.

Anteriorly the termination of the lateral pair of blades are bent at a certain distance from the posterior end of the instrument so as to form a notch or shoulder, which when the speculum is fairly introduced into 10 the vagina shall by its own resiliency spring into the foramina ovalia and thus retain its position, and these blades having a greater length of wire than the other blades are extended beyond the shoulder or notch into a circular form so as to answer the purpose of a pair of handles, which when pressed together by the thumb and index finger (the anterior 15 end of the superior and inferior blades being first brought within them) separate the four blades of the speculum, thus giving a clear and uninterrupted view of the entire length of the vaginal passage up to the os uteri.

Posteriorly the blades have a circular termination and are set out- 20 wardly, thus giving a greater power of separation, and at the same time a steady retention of the instrument in the vaginal passage.

The anterior termination of the four blades are curved outwards so as to separate the labiæ completely in every direction, the inferior blade is curved at its anterior termination so as to repress the os coccygis when 25 needful.

One pair of the posterior transverse lateral blades is made shorter than the other pair, so that the other or longer pair of transverse blades may overlap or be included in each other, thus compressing the posterior ends of the four blades into such a space as may be introduced into the 30 vagina without inconvenience to the patient.

And in order to explain my said Invention more fully, I now proceed to describe the best means I am acquainted with for carrying the same into practical effect, reference being had to the illustrative Sheet of Drawings accompanying these Presents, and to the numeral figures 35 and letters of reference marked thereon respectively as follows :—

Blackbee's Improvements in Surgical Instruments termed Specula.

DESCRIPTION OF THE DRAWING.

Figure 1 represents an elevation of one form of construction of my improved "speculum," as it would appear when out of use and distended; Figure 2 an elevation of the speculum as it would appear when ready
5 for use and collapsed at its point or inner end; Figures 3 and 4 represent similar views of another form of construction of my improved speculum, shewing another mechanical contrivance for collapsing and expanding the inner end of the speculum; Figure 5 represents the aforesaid collapsing and expanding mechanism detached from the speculum. At
10 each of the above-mentioned Figures I employ similar letters of reference to denote corresponding parts at each of such said Figures respectively.

A, A, marks a piece of hard drawn white metal wire thickly plated or coated with silver, the parts at B being also gilt or coated with gold.
15 At Figure 2, C marks a ring of wood or other suitable material, which when placed over the speculum keeps it collapsed to facilitate its introduction into the patient, the said ring being drawn outwards during the insertion of the speculum, thus allowing it to expand gradually until it has been inserted sufficiently far, after which the aforesaid ring is
20 altogether removed.

The mechanism represented at Figures 4 and 5 for collapsing and expanding the speculum is constructed and operates in the following manner:—

At Figure 5, D marks a piece of plated wire, one end of which is
25 formed with a ring E to serve as a handle; the opposite end has a ball of metal G fixed thereto, and coated with gold. H is a plate of metal fixed on D with four holes made therein, through which pass the plated wires *a, b, c, d*; the lower ends of these wires are fixed in a plate of metal I, at the centre of which there is a hole through which the wire D
30 can pass freely.

The upper ends of the wires *a, b, c, d*, are formed hooked, as shewn, and these hooked parts are intended to take into rings *e* fixed to each blade of the speculum, so that upon inserting each hook into its respective hole and holding the plate H by the thumb of the hand and with
35 the fingers forcing the ball G outwards, the plate H as it slides over the wires *a, b, c, d*, will collapse the inner ends of the blades as at Figure 4, and hold them therein during the insertion of the speculum

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into the patient, after which and when inserted sufficiently far, the operator by the ring E pulls the ball back, at the same time placing his thumb underneath the plate I until the hooked parts of the wires *a, b, c, d*, become disengaged from the holes in the blades, when the mechanism can be entirely removed from the speculum. 5

By these means the blades of the speculum are allowed to expand gradually so as not to give a sudden shock to the patient.

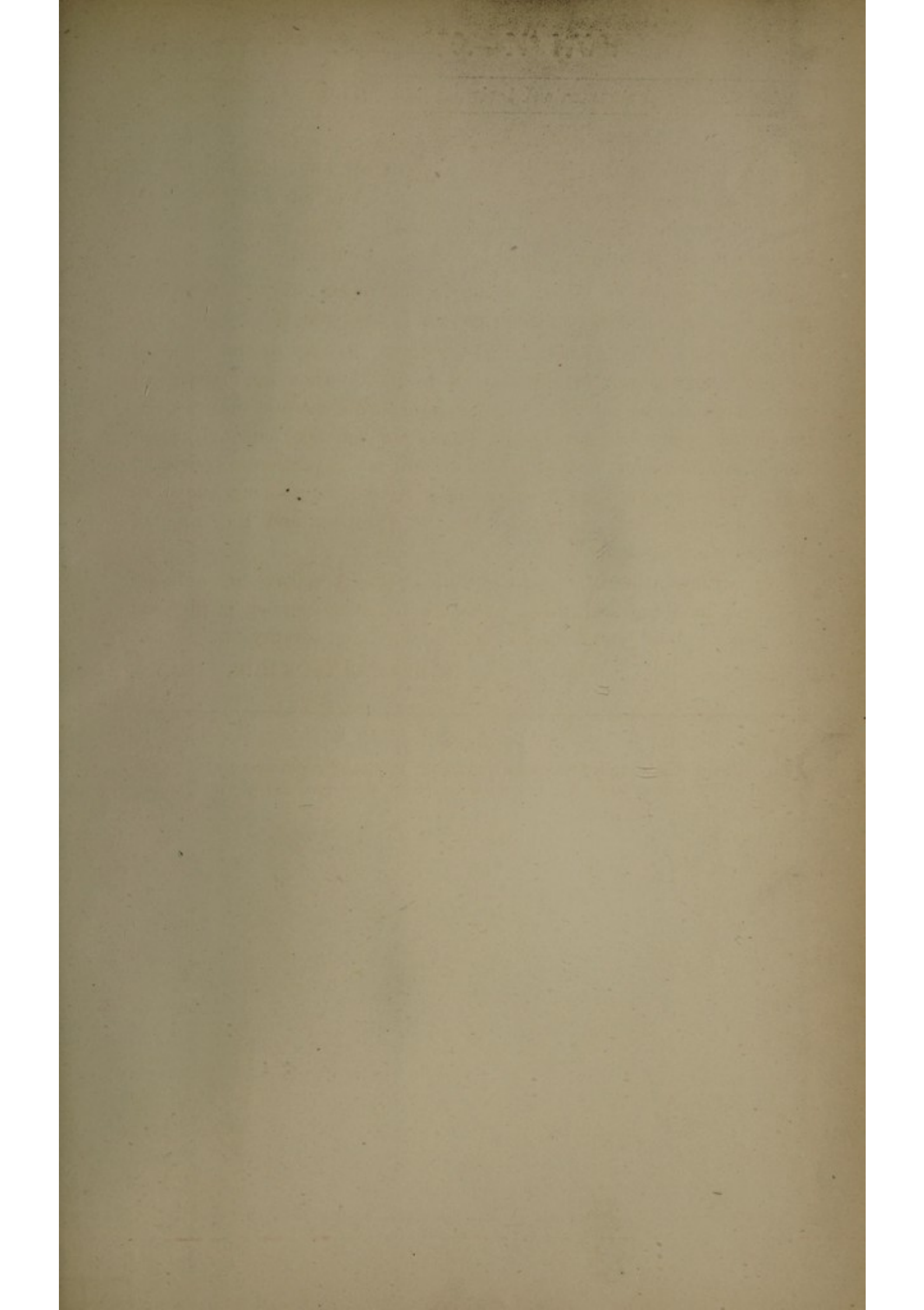
Having now fully described and set forth the nature and object of my said Invention for "Improvements in the Construction of Surgical Instruments known as 'Specula,'" together with the best means I am 10 acquainted with for carrying the same into practical effect, I would remark in conclusion that I hereby declare my Invention to consist in and I claim constructing a speculum of a resilient skeleton shape, as above described and represented by the Drawing and the mode of operation above stated. 15

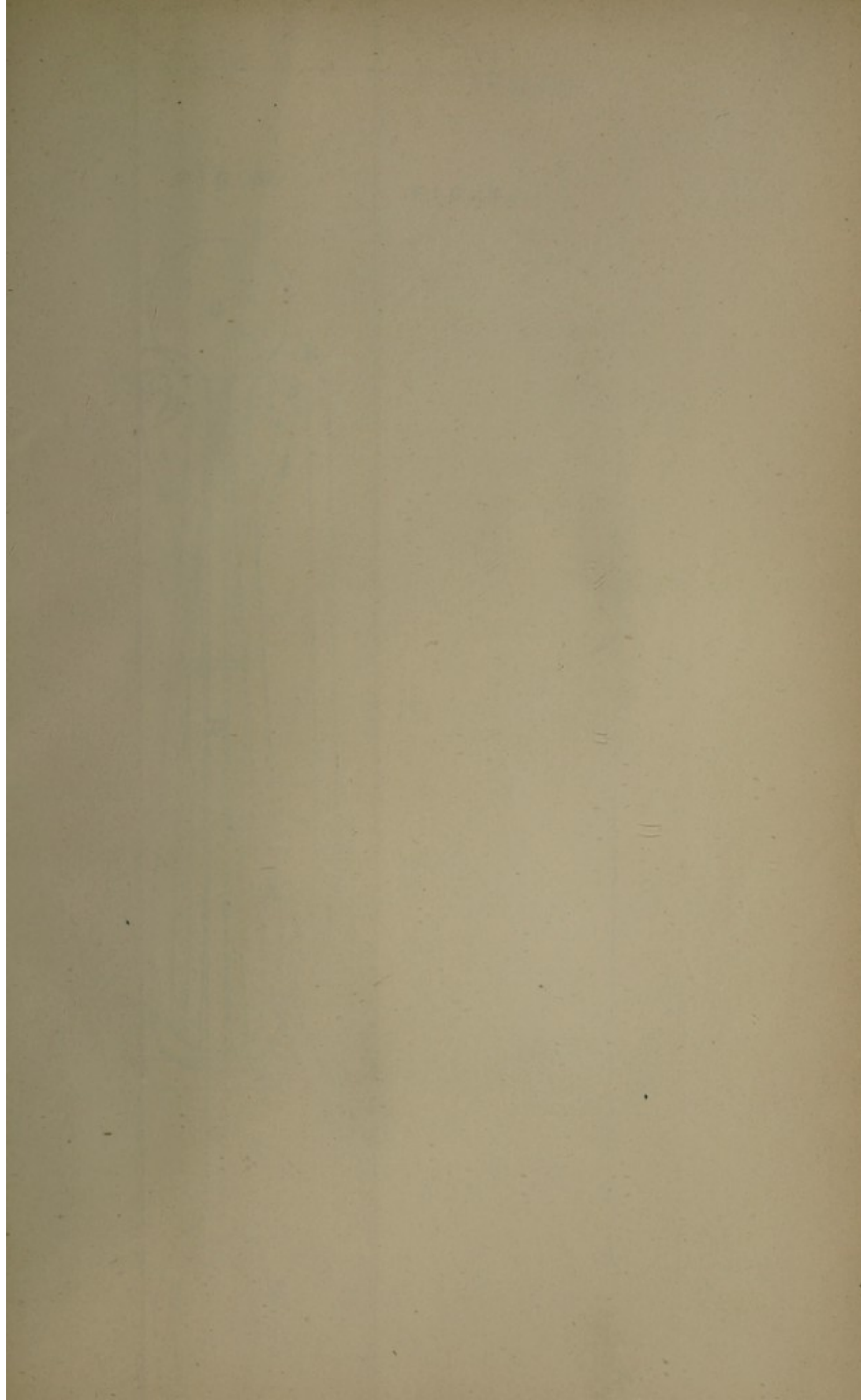
In witness whereof, I, the said Robert Blackbee, have hereunto set my hand and seal, this Fourteenth day of December, in the year of our Lord One thousand eight hundred and seventy.

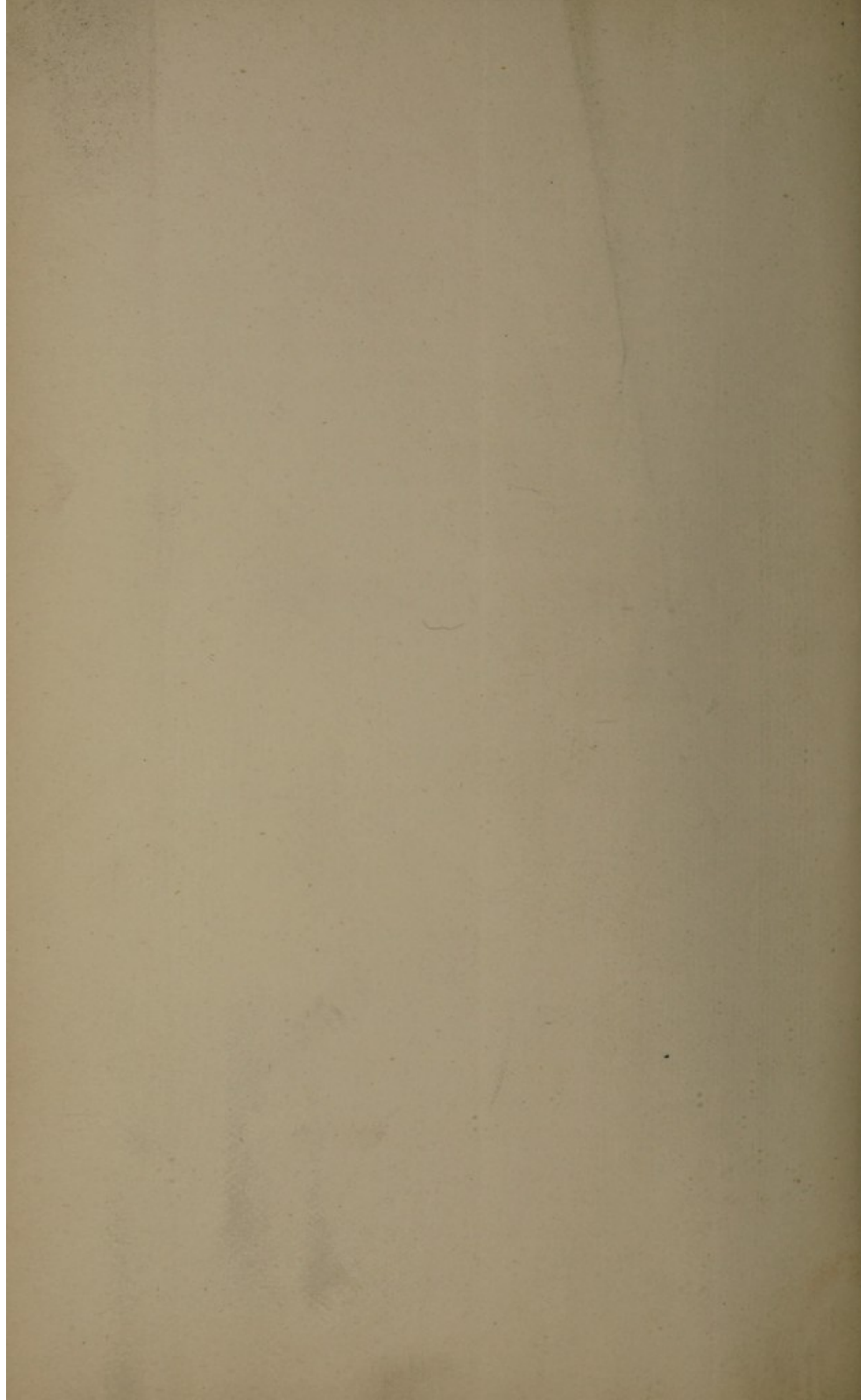
ROBERT BLACKBEE. (L.S.)

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1870.







A.D. 1870. JUNE 14. N^o 1700.
BLACKBEE'S SPECIFICATION.

FIG. 2.

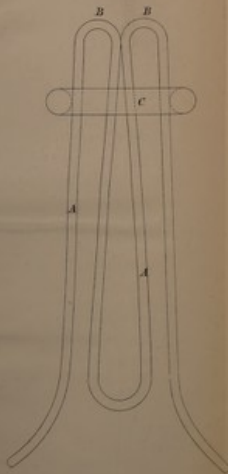


FIG. 1.

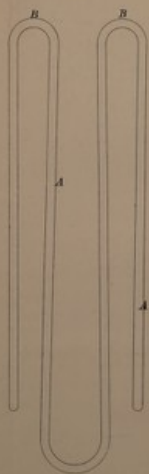


FIG. 4.

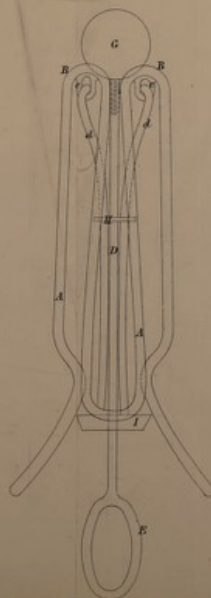
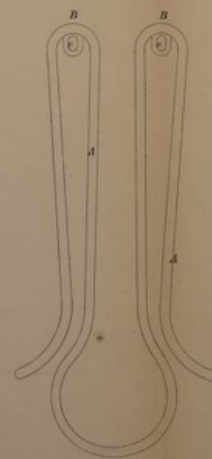
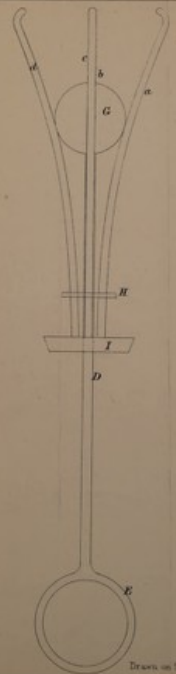


FIG. 3.



(1 SHEET)
FIG. 5.



The filed drawing is not colored.

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Printers to the Queen and Her Majesty, 1870.

Drawn on Stone by Mally & Sons.

