

**Improvements in the construction of machines used in the manufacture of surgical lint and other linted or piled fabrics / [Charles Edward Bennett].**

**Contributors**

Bennett, Charles Edward.  
Browne, William Tyrall  
Davies, George

**Publication/Creation**

London : Printed for Her Majesty's Stationery Office by Darling and Son, Ltd, 1888.

**Persistent URL**

<https://wellcomecollection.org/works/td2z544v>

**License and attribution**

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

*Date of Application, 23rd July, 1887*

*Complete Left, 21st Apr., 1888*

*Complete Accepted, 25th May, 1888*

---

A.D. 1887, 23rd JULY. N° 10,291.

---

### PROVISIONAL SPECIFICATION.

---

#### Improvements in the Construction of Machines Used in the Manufacture of Surgical Lint and other Linted or Piled Fabrics.

We CHARLES EDWARD BENNETT of Union and Bengal Street Mills, Ancoats Cotton Doubler, and WILLIAM TYRALL BROWNE of 76 Prussia Street Machinist, both of Manchester in the County of Lancaster do hereby declare the nature of this invention to be as follows :—

- 5 The object of this invention is to more perfectly manufacture or lint the surface of fabrics such as surgical lint and other woven material requiring as essential qualities softness, absorbency and a linted surface, and the invention consists principally of a mechanical arrangement or combination of parts for increasing or decreasing the distance traversed horizontally to-and-fro of the knife cushion, and
- 10 knife carriage of machines used in such manufacture, so as to adjust or accommodate such traverse to suit the nature of the woven fabric under operation and the quality of linted surface desired to be produced.

To the end of the knife carriage we screw or otherwise attach a stud which moves to and fro horizontally with the same.

- 15 At or near the end of this stud we mount a brass step or bearing (preferably in two parts) fitting in a vertical slot in a reciprocating lever. This lever is hung from a pin or stud fixed to a nut which is capable of sliding up or down in a vertical slot in a bracket or pedestal attached to the frame.

- The said nut (and consequently the pin or stud attached thereto which forms the
- 20 fulcrum of the reciprocating lever) can be moved up or down in this slot by means of a screw passing through the nut ; which screw can be turned by a hand wheel or winch.

In the slot of the reciprocating lever (below the stud attached to the knife carriage) is another step or bearing through which passes an excentric or crank pin fixed on

[Price 8d.]

---

*Bennett & Browne's Machines Used in the Manufacture of Surgical Lint, &c.*

---

or formed with a revolving shaft which works through the slot, and it will be evident that the revolution of this shaft with its crank pin or excentric will thus give a reciprocating motion or traverse to the knife carrier, knife and cushion, and that the length of this traverse will depend upon the position (either higher or lower) of the pin or stud which forms the fulcrum on which the slotted lever reciprocates. And as 5  
above described the raising or lowering of this pin or stud is effected by turning the screw by means of the hand wheel or winch, and thus a perfect command is obtained over the reciprocating action of the knife and its adjuncts the result of which will be a more even linting of the surface of the fabric being operated upon.

Dated this 22nd day of July 1887.

10

GEORGE DAVIES,  
4, St. Ann's Square, Manchester,  
Agent for the Applicants.



## COMPLETE SPECIFICATION.

**Improvements in the Construction of Machines Used in the Manufacture of Surgical Lint and other Linted or Piled Fabrics.**

We CHARLES EDWARD BENNETT of Union and Bengal Street Mills, Ancoats, Cotton Doubler and WILLIAM TYRALL BROWNE of 76 Prussia Street Machinist both of Manchester in the County of Lancaster do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described  
 5 and ascertained in and by the following statement :—

The object of this invention is to more perfectly manufacture or lint the surface of fabrics such as surgical lint and other woven material requiring as essential qualities softness, absorbency, and a linted surface and the invention consists principally of a mechanical arrangement or combination of parts for increasing or decreasing the  
 10 distance traversed horizontally to and fro by the knife cushion and knife carriage of machines used in such manufacture, so as to adjust or accommodate such traverse to suit the nature of the woven fabric under operation and the quality of linted surface desired to be produced.

Such being the nature of our said invention the manner in which the same is to be  
 15 performed or carried into practical effect will be readily understood on reference to the annexed drawing and the following explanation thereof.

The drawing represents an elevation (partly in section) of that portion of a linting machine to which our invention relates, *a* being a part of the framing, *b* one end of the knife carriage and *c* the horizontal slot in the frame in which the end of the  
 20 carriage slides to and fro.

To the end *b* of the knife carriage we screw, or otherwise attach a stud *d* which moves to and fro horizontally with the same.

At or near the end of this stud we mount a brass step or bearing *e* (preferably in two parts) fitting in a vertical slot *f* in a reciprocating lever *g*. This lever *g* is hung  
 25 from a pin or stud *h* fixed to a nut *i* which is capable of sliding up or down in a vertical slot *k* in a bracket or pedestal *l* attached to the frame *a*.

The said nut *i* (and consequently the pin or stud *h* attached thereto which forms the fulcrum of the reciprocating lever *g*) can be moved up or down in this slot *k* by means of a screw *m*, passing through the nut, which screw can be turned by a hand wheel *n*  
 30 or by a winch.

In the slot *f* of the reciprocating lever *g* (below the stud *d* attached to the knife carriage) is another step or bearing *o*, through which passes an excentric or a crank pin *q* fixed on or formed with a revolving shaft *p* which works through the slot *f* and it will be evident that the revolution of this shaft *p* with its crank pin *q* or  
 35 excentric will thus give a reciprocating motion or traverse to the knife carrier *b* and consequently to the knife and cushion, and that the length of this traverse will depend upon the position (either higher or lower) of the pin or stud *h* which forms the fulcrum on which the slotted lever *g* reciprocates :—And as above



---

*Bennett & Browne's Machines Used in the Manufacture of Surgical Lint, &c.*

---

described the raising or lowering of this pin or stud *h* is effected by turning the screw *m* by means of the hand wheel *n* or winch, and thus a perfect command is obtained over the reciprocating action of the knife and its adjuncts the result of which will be a more even linting of the surface of the fabric being operated upon.

Having now particularly described and ascertained the nature of our said invention 5 and in what manner the same is to be performed we declare that what we claim is :—

The mechanical arrangement or combination of parts (substantially as hereinbefore described and illustrated by the drawings annexed) for increasing or decreasing the 10 traverse to and fro of the knife, cushion, and knife-carriage so as to adjust such traverse to suit the nature of the woven fabric under operation and the quality of the linted surface desired to be produced.

Dated this 20th day of April 1888.

GEORGE DAVIES,  
4, St. Ann's Square, Manchester, 15  
Agent for the Applicants.

---

LONDON : Printed for Her Majesty's Stationery Office,  
By DARLING AND SON, LTD.

1888.





