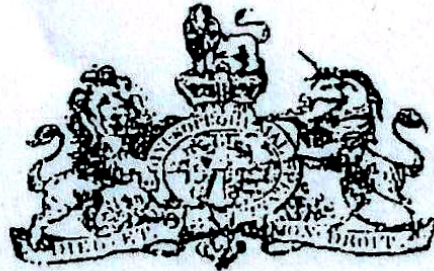


**RESERVE COPY**

---

A.D. 1840 . . . . . N° 8548

---

**Buttons, Knobs, Rings, and other Articles.**

---

**PROSSER'S SPECIFICATION.**

**TO ALL TO WHOM THESE PRESENTS SHALL COME. I, RICHARD PROSSER, of Birmingham, in the County of Warwick, Civil Engineer, send greeting.**

**WHEREAS** I did, by petition, humbly represent unto Her present  
5 most Excellent Majesty Queen Victoria, that, after considerable appli-  
cation and expense, I had invented "**CERTAIN IMPROVEMENTS IN MANU-  
FACTURING BUTTONS FROM CERTAIN MATERIALS, WHICH IMPROVEMENTS IN  
MANUFACTURING ARE APPLICABLE IN WHOLE OR IN PART TO THE PRODUCTION  
OF KNOBS, RINGS, AND OTHER ARTICLES FROM THE SAME MATERIALS;**" and  
10 Her said Majesty, being willing to give encouragement to all arts and  
inventions which may be for the public good, was graciously pleased, by  
Her Royal Letters Patent under the Great Seal of the United Kingdom  
of Great Britain and Ireland, bearing date at Westminster the Seven-  
teenth day of June One thousand eight hundred and forty, in the third  
15 year of Her reign, for Herself, Her heirs and successors, to give and  
grant unto me, the said Richard Prosser, my executors, administrators,  
and assigns, Her especial licence, full power, sole privilege and authority,  
that I or they, by myself or themselves, or by my or their deputies,  
servants, or agents, or such others as I, or they, should agree with (and  
20 no others), during the term of fourteen years from the date of the said  
Letters Patent, should and lawfully might make, use, exercise, and vend

A.D. 1840.—N<sup>o</sup> 8548*Prosser's Buttons and other Articles.*

my said Invention within that part of Her said Majesty's dominions called England, Her dominion of Wales, and town of Berwick upon Tweed, and also in all Her Majesty's Colonies and Plantations abroad, in such manner as to me, my executors, administrators, and assigns, shall seem meet, and as that I, or they, shall enjoy the whole profit and 5 advantage arising by reason of the said Invention during the said term of fourteen years; and for that end Her said Majesty requires and strictly commands all Her subjects whatsoever within England, Wales, and Berwick upon Tweed, and also in the Colonies and Plantations aforesaid, that they shall not, neither directly or indirectly, make, use, or 10 put in practice my said Invention or any part thereof, nor in anywise counterfeit, imitate, or resemble the same, nor make any addition thereto or subtraction therefrom, whereby to pretend himself or themselves to be the Inventor or Inventors thereof: And whereas the said Letters-Patent also contains a proviso obliging me, the said Richard Prosser, 15 particularly to 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 to cause the same to be inrolled in Her Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said in part recited Letters 20 Patent, as in and by the same (reference being thereunto had) will more fully and at large appear.

**NOW KNOW YE**, that in compliance with the said proviso, I, the said Richard Prosser, do hereby declare that my said Invention is described and ascertained in manner following, and by the aid of the 2: sheet of drawings hereunto annexed (that is to say):

Whereas potters have been in use to manufacture certain clays and clayey earths with and without an admixture of other ingredients, and also occasionally some of the said other ingredients (as flint and feld-spar) with and without any admixture of clay or clayey earths, into articles of various 3: forms, and adapted to various purposes, and have, in order to combine the said materials thoroughly and to reduce them to a state sufficiently plastic to be fashioned by the hand of the potter or otherwise, been hitherto in the practice of first mixing or tempering the same with large quantities of water, and so converting them into an aqueous mass. 4:

A.D. 1840.—N<sup>o</sup> 8548

3

---

*Prosser's Buttons and other Articles.*

---

which mass is afterwards, by partial evaporation or drying, brought into the kneadable state technically called "slip": And whereas it is found necessary, in order to expel the larger portion of water still remaining in the said "slip," to subject the articles into which the same may  
5 be formed to certain other drying processes of a tedious description, in the course of which process the articles so manufactured are subject to great shrinkage and change of form: And whereas such shrinkage and change of form are of especial prejudice in the case of all small articles, such as buttons, knobs, rings, and the like, and has been or  
10 may have been the reason that hitherto articles of that description have been seldom manufactured of the same materials as earthenware and porcelain, except as appendages thereto: Now the nature of my said invented improvements consist, firstly, in manufacturing from the same materials as are made use of by the potter in the various branches of  
15 his manufacture all or most of the articles which have been or may be manufactured therefrom, but more especially articles of small dimensions, such as buttons, knobs, rings, and the like, without the addition of any water to the said materials as found in their original state, whereby the whole of the before-mentioned processes of watering or tempering,  
20 and evaporating or drying (except in so far as water may be requisite in the grinding process), are dispensed with, and all the trouble, delay, and other drawbacks attendant thereon; and, secondly, in manufacturing from the said materials and others, a button of the improved form herein-after described. And I declare that the following is a full  
25 description of the manner in which the said improvements are to be performed, reference being had to the illustrative drawings hereunto annexed (that is to say):

I begin by taking clays or clayey earths in their natural state, and pound or grind the same into powder. If, in their natural state, they  
30 contain too much moisture to admit of their being so pounded or ground into powder, I expose them to evaporation till they are desiccated to the degree required. If an article of a better quality is wanted than can be manufactured from clay or any clayey earth alone, I add as much of any of the other substances (as flint or feld-spar) which potters are  
35 in the practice of adding to clay or clayey earths for the purpose of

*Prosser's Buttons and other Articles.*

making earthenware and porcelain, as may produce the quality required, following, in respect of the proportional quantities of each ingredient, the same rules as potters are in use to observe, and adding the said other substances (as flint or feld-spar) in the state of powder.) Or, instead of pounding or grinding the said clay or clayey earths and the 5 said flint or other substances separately, I pound or grind them together, when both are equally in a state of dryness fit for the purpose.

I next cast the powder so obtained, whether consisting of clay or a clayey earth alone, or partly of clay or a clayey earth and partly flint or 10 feld-spar, or some other of the substances aforesaid, into or upon a sieve or riddle having about two thousand apertures or meshes to each square inch; and as much thereof as passes through such sieve or riddle I consider to be in a state of comminution sufficient for being manufactured into most articles requiring a fine smooth surface; when such 15 a fine smooth surface is not essential, powder of a coarser description may be used, taking care only that the powder in each case is of an uniform degree of granulation, and not made up of very fine and very coarse particles mixed together.

And to manufacture the powder so obtained into buttons and other 20 similar articles, I employ a machine and tools, such as are represented in Figures 1, to 9, inclusive.

Figure 1, is an elevation of a fly press and treadle, with certain parts thereof in section: A, is the handle of the press; B, the bolt; C, a table or bed to which the press is firmly secured; 1, is a cylindrical tool, 25 which is secured into the bolt B, and is, on its under face, of the form in reverse (that is, in hollow instead of relief,) proposed to be given to the top of the button; 2, is another tool, of a sort of a T shape, which at top is of the form in reverse (that is, in relief instead of hollow,) proposed to be given to the bottom or back of the button, and fits into a vertical recess 30 of the same sort of T shape, in the centre of the bolster 3, but fits loosely therein, so that it may be worked easily from below by means of a rod X, which connects it with the treadle at bottom, D, W, Z, Y. The top or widest part of the recess in the centre of the bolster 3, is of such depth, that when the tool 2, falls to the bottom of it, there is space 35

A.D: 1840.—N<sup>o</sup> 8548

5

---

*Prosser's Buttons and other Articles.*

---

enough above to hold the quantity of powder necessary for the formation of the button; so that this part, which may be called the mould, serves the double purpose of a measure for the powder and a ring or collar to prevent the spread of the powder laterally when the tool 1, is  
5 brought down upon it. The distance between the top of the tool 2, and the top of the mould, may be increased or diminished, according to the thickness required to be given to the button, either by lessening the depth of the mould, or by increasing the thickness of the head of the tool 2, but most conveniently by the latter means.

10 Figures 5, and 6, are plans of the press, showing the manner in which it is secured by screws to the table or bed C; and Figure 9, is a plan of the treadle. The mode of operation is as follows :

The vacant space in the mould is filled with powder, and the powder struck off to an exact level with the top of the mould, as indicated by  
15 the line *a . . . . a*; such power is then applied to the handle A, of the press, as will bring down the tool 1, with a force of about 200 pounds to the square inch, upon the powder lying in the mould on the face of the under tool 2, whereby a solid button is at once formed, which will be found of great hardness, and susceptible of little, if any, alteration of  
20 form from subsequent exposure to heat or moisture, and may be afterwards glazed and fired, or fired only, in the ordinary way in which earthenware and porcelain are fired, then glazed and fired again. In order to remove the button thus formed from the mould, the workman gives a contrary turn to the handle A, of the press, which raises the tool  
25 1, and he then presses down with his foot the end Y, of the treadle, whose fulcrum is at Z, which causes the opposite end W, to rise, and along with it the rod X, attached to the bottom of the tool 2, till the top of that tool reaches near enough to the top of the mould, to enable him to remove the button by hand. A reverse motion given the treadle  
30 by pressing the foot on the end W, restores the tool 2, to its original position, and the entire apparatus to a condition ready for a repetition of the process just described.

The tools represented as in use in the press, Figure 1, are intended to make a button to which a metallic or other shank is afterwards to be  
35 attached, in the following manner :

---

*Prosser's Buttons and other Articles.*

---

A recess for receiving the shank is formed in the back of the button, by a corresponding projection on the face of the tool 2, as shown on a small scale in Figure 1; and on a larger scale in Figure 7c, excepting only so much of the said recess as is represented to be undercut; which must be done by hand after the button comes from the press. 5  
The shank to be added is first fixed to a small metal cup, which is dished or cupped so as nearly to fill the recess in the back of the button. A little of any strong cement in a fluid or semi-fluid state, as shell-lac, is then introduced into the recess, and while it is in such fluid or semi-fluid state, the cup of the shank is inserted; when the 10 shell-lac becomes hard, the shank will be found to adhere, and be sufficiently firm for all purposes to which buttons are usually applied. If a button with holes through it instead of a shank attached is required to be produced, then the tools 1, and 2, must be so cut in their under and upper surfaces as to produce the holes required. In Figure 8, I 15 have shown a button of a new construction, of my Invention, which possesses several advantages over the said common four-hole button. It has only two holes instead of four, with a groove or channel in the upper surface between the two holes, so that when sewn to any garment the thread rests in the groove or channel, and is thereby protected from 20 abrasion, and if sewn on in such manner that the two holes shall be in a straight line with the length of the button-hole, the button will be always inserted with less widening and wearing of the button-hole than is usual with the four-hole button. The variations necessary to be made in the tools 1, and 2, for the purpose of manufacturing rings, 25 are shown in Figure 2, and those necessary for making knobs in Figure 3, and from these the manufacturer will readily understand how any other variety of configuration which may be required in the manufacture of other articles is to be obtained. All that is necessary in each case is to vary the faces of the tools 1, and 2, according to the 30 configuration desired by any of the well-known processes of cutting or engraving in hollow and relief. A great advantage attending this facility of giving any sort of figured surface to the manufactured article is, that the commonest articles, such as bricks and tiles, when manufactured by means of my improved process, may, at a very small additional 35

A.D. 1840.—N<sup>o</sup> 8548

7

---

*Prosser's Buttons and other Articles.*

---

cost, have almost any degree of excellence in point of design given to them. A brick produced by means of such tools as are represented in Figure 4, of the drawings hereunto annexed, and with the aid of a fly press and treadle of suitable strength, would have no advantage over  
5 a brick made in the ordinary way, except in the greater quickness and economy of the process of manufacturing; but the faces of the tools 1, and 2, which, in the said Figure 4, are supposed and represented to be perfectly plain, may be graven of any form whatever, either in hollow or relief, so as to represent coats of arms,<sup>3</sup> architectural ornaments, &c.; and the brick will be produced as readily, and  
10 in a state of as great perfection, from the graven as from the plain tools, a result which I believe to be wholly unattainable by any of the modes of manufacturing bricks heretofore in use. When the buttons, knobs, rings, or other articles manufactured in manner aforesaid have  
15 been removed from the press, they are ready to be immediately glazed and burned, or burned only, in the same way as articles of earthenware and porcelain are commonly glazed and burned; and, in order that they may be, when burned, of any particular colour desired, as white, black, or blue, the same metallic oxides must be added to the  
20 powdered clay as potters are in use to employ for the production of such colours; and the articles may also receive any degree of decoration which may be desired, either by printing, gilding, enamelling, or otherwise, according to the various modes in which earthenware and porcelain are ordinarily decorated. I prefer making the tools I use for the  
25 purpose of determining the configuration of the articles, such as those tools represented in 1, 2, and 3, of Figure 1, and in Figures 2, and 3, of the drawings hereunto annexed, in steel, when they do not exceed about two inches in diameter; but when they must be of larger dimensions, as in the case of bricks and tiles, I find cast-iron answers the  
30 purpose sufficiently well. In working the press, I find it necessary to do so at a moderate velocity; for, if worked rapidly, like a stamp or pile engine, then the powdered clay is liable to be blown out of the mould, and the article intended to be produced is spoiled.

And having now described the nature of my said Invented Improvements, and the manner in which the same is to be performed, I

8

A.D. 1840.—N<sup>o</sup> 8548

---

*Prosser's Buttons and other Articles.*

---

declare, that what I claim as of my Invention is,—Firstly, the manufacturing of buttons, knobs, rings, and generally all or most of the other articles which have been or can be made from any of the materials used in the manufacturing of earthenware and porcelain, by means of the improvements in manufacturing herein-before described, of 5 which improvements the distinguishing features are, that the said materials are used in a state of powder, and manufactured by pressure between hard surfaces, either plain or figured, into solid articles, without any water being used in the course of the said process (except in so far as water may be requisite in grinding them into powder), 10 and which improvements in manufacturing I call the dry process of pottery and brick-making, in contradistinction to the ordinary process, in which great quantities of water are used; and, Secondly, the manufacturing of buttons of the improved form with two holes instead of four, herein-before described, and represented in Figure 8, of 15 the drawings hereunto annexed, and whether the said button is manufactured from the materials commonly used in the manufacture of earthenware and porcelain, and by my said improvements in manufacturing, or from any other materials and by any other process: And such my said Invention being, to the best of my knowledge and 20 belief, entirely new and never before used within that part of Her said Majesty's United Kingdom of Great Britain and Ireland called England, Her dominion of Wales, town of Berwick upon Tweed, or in any of Her said Majesty's Colonies and Plantations abroad, I do hereby declare this to be my specification of the same, and that I 25 do verily believe this my said specification doth comply in all respects fully and without reserve or disguise with the proviso in the said herein-before in part recited Letters Patent contained, wherefore I hereby claim to maintain exclusive right and privilege to my said Invention. 30

In witness whereof, I, the said Richard Prosser, have hereunto set my hand and seal, this Seventeenth day of December One thousand eight hundred and forty.

RICHARD PROSSER. (L.S.)



A.D. 1840.—N<sup>o</sup> 8548

9

*Prosser's Buttons and other Articles.*

AND, BE IT REMEMBERED, That on the Seventeenth day of December in the year of our Lord 1840, the aforesaid Richard Prosser came before our said Lady the Queen in Her Chancery, and acknowledged the specification aforesaid, and all and everything  
 5 therein contained and specified in form above written; and also the specification aforesaid was stamped, according to the tenor of the Statute made for that purpose.

Enrolled the Seventeenth day of December in the year of our Lord One thousand eight hundred and forty.

10

## PROSSER'S DISCLAIMER.

In the Matter of a Patent granted to Richard Prosser, of Birmingham, in the County of Warwick, Civil Engineer, for his Invention of  
 "CERTAIN IMPROVEMENTS IN MANUFACTURING BUTTONS FROM CERTAIN  
 MATERIALS, WHICH IMPROVEMENTS IN MANUFACTURING ARE APPLICABLE  
 15 IN WHOLE OR IN PART TO THE PRODUCTION OF KNOBS, RINGS, AND OTHER  
 ARTICLES FROM THE SAME MATERIALS," bearing date at Westminster, the Seventeenth day of June One thousand eight hundred and forty.

20 Disclaimer and Memorandum of Alteration proposed to be entered by Richard Prosser with the Clerk of the Patents of England, pursuant to an Act passed in the fifth and sixth years of the reign of His late Majesty King William the Fourth, entitled "An Act to amend the Law touching Letters Patent for Inventions."

25 I, the said Richard Prosser, do hereby alter the description given in the said specification of the manner in which the said Invention is performed, as follows, that is to say: In describing the second head of the said Invention, I speak of "Manufacturing from the said materials *and others* a button of the improved form herein-after described:" Now,  
 30 therefore, I disclaim the said words "and others;" so that the said paragraph will read thus, "manufacturing from the said materials a button

No

A.D. 1840.—N° 8548

*Prosser's Buttons and other Articles.*

of the improved form herein-before described." And further, in the claim of the second part of the said specification, I state, "And, secondly, the manufacturing of buttons of the improved form with two holes of the form herein-before described and represented in Figure 8, of the drawings hereunto annexed, *and whether the said button is manu- 5* *factured* from the materials commonly used in the manufacture of earthenware and porcelain, and by my said improvements in manufacturing, *or from any other materials and by any other process :*" Now I therefore disclaim the words "and whether the said button is manufactured," and also the words "or from any other materials and by 10 any other process;" so that the paragraph will read thus, "And, secondly, the manufacturing of buttons of the improved form, with two holes instead of four, herein-before described and represented in Figure 8, of the drawings hereunto annexed, from the materials commonly used in the manufacture of earthenware and porcelain, and by my said improve- 15 ments in manufacturing."

In witness whereof, I, the said Richard Prosser, have hereunto set my hand and seal, this Eighteenth day of December in the year of our Lord One thousand eight hundred and forty-five.

RICHARD PROSSER. (L.S.)

20

To the CLERK of the PATENTS of ENGLAND.

This is to certify, That the above-named Richard Prosser, of Birmingham, in the County of Warwick, Civil Engineer, has applied to me for leave to enter with you the above-written 25 disclaimer of part of the specification of a certain Invention for which Letters Patent were granted to him under the Great Seal of Great Britain, dated at Westminster the Seventeen day of June 1840, and to which a specification was duly enrolled: And having considered of the said application, and no objection having been made 30 to the same, I hereby grant leave to the said Richard Prosser to file his said disclaimer, pursuant to the Statute passed in the fifth and sixth years of the reign of His late Majesty King William the

A.D. 1840.—N<sup>o</sup> 8548

11

---

*Prosser's Buttons and other Articles.*

---

Fourth, entitled "An Act to amend the Law touching Letters Patent for Inventions."

FRED. THESIGER.

Temple, December 27th, 1845.

---

5 **AND BE IT REMEMBERED**, That on the Eighteenth day of December in the year of our Lord 1845, the aforesaid Richard Prosser came before our said Lady the Queen in Her Chancery, and acknowledged the disclaimer aforesaid, and all and everything therein contained and specified in form above written; and also the  
10 disclaimer aforesaid was stamped, according to the tenor of the Statute made for that purpose.

Enrolled the Twenty-ninth day of December in the year of our Lord One thousand eight hundred and forty-five.

---

**PROSSER'S MEMORANDUM OF ALTERATION.**

15 In the Matter of a Patent granted to Richard Prosser, of Birmingham, in the County of Warwick, Civil Engineer, for his Invention of  
"CERTAIN IMPROVEMENTS IN MANUFACTURING BUTTONS FROM CERTAIN  
MATERIALS, WHICH IMPROVEMENTS IN MANUFACTURING ARE APPLICABLE  
IN WHOLE OR IN PART TO THE PRODUCTION OF KNOBS, RINGS, AND OTHER  
20 ARTICLES FROM THE SAME MATERIALS."

Memorandum of Alteration proposed to be entered by Richard Prosser with the Clerk of the Patents of England, pursuant to an Act passed in the fifth and sixth years of the reign of His late Majesty King William the Fourth, entitled "An  
25 Act to amend the Law touching Letters Patent for Inventions."

Whereas since the enrolment of the specification of the said Invention, I have found that any materials other than clays and clay earths, such as used by potters, and in the said specification mentioned, cannot  
30 be so beneficially employed in performing my Invention as such clays or clay earths, and that no other process than that described in the said

*Prosser's Buttons and other Articles.*

specification can be used with so much advantage : I, the said Richard Prosser, am therefore desirous of disclaiming so much of the said specification as relates to such other materials, and of altering the said specification, in manner following, that is to say :

In describing the second head of the said Invention in the said specification, I speak of "manufacturing from the said materials *and others* a button of the improved form herein-after described : " Now, therefore, for the reason aforesaid, I disclaim the said words "and others ;" so that the said paragraph, as hereby altered, will read thus, "manufacturing from the said materials a button of the improved form herein- 5 after described." And further, in the claim of the second part of the said Invention mentioned in the said specification, I state, "And, secondly, the manufacturing of buttons of the improved form, with two holes instead of four, herein-before described, and represented in Figure 8, of the drawings hereunto annexed, *and whether the said button is manu- 15 factured* from the materials commonly used in the manufacture of earthenware and porcelain, and by my said improvements in manufacturing, *or from any other materials and by any other process :*" Now, therefore, for the reason aforesaid, I disclaim the words "and whether the said button is manufactured," and also the words "or from any other 20 materials and by any other process ;" so that the paragraph will read thus, "And, secondly, the manufacturing of buttons of the improved form with two holes instead of four, herein-before described, and represented in Figure 8, of the drawings hereunto annexed, from the materials commonly used in the manufacture of earthenware and porcelain, and 25 by my said improvements in manufacturing."

In witness whereof, I, the said Richard Prosser, have hereunto set my hand and seal, this Fifth day of May in the year of our Lord One thousand eight hundred and fifty-two.

RICHARD PROSSER. (L.S.) 30

To the CLERK of the PATENTS of ENGLAND.

This is to certify, That the above-named Richard Prosser has applied to me for leave to enter with you the above-written disclaimer and

A.D. 1840.—N<sup>o</sup> 8548

13

*Prosser's Buttons and other Articles.*

memorandum of alteration of part of the specification of a certain  
 Invention for which Letters Patent were granted to him under the  
 Great Seal of Great Britain, dated at Westminster the Seventeenth day  
 of June One thousand eight hundred and forty, and to which a specifi-  
 5 cation was duly enrolled: And having considered of the above appli-  
 cation, and no objection having been made to the same, I hereby grant  
 leave to the said Richard Prosser to file his said disclaimer and memo-  
 randum of alteration, pursuant to the Statute passed in the fifth and  
 sixth years of the reign of His late Majesty King William the Fourth,  
 10 entitled An Act to amend the Law touching Letters Patent for  
 Inventions.

Temple, 6th May 1852.

FRED. THESIGER.

Entered and filed with the Clerk of the Patents for  
 England, this 8th Day of May 1852.



15 **AND BE IT REMEMBERED**, That on the Fifth day of May in  
 the year of our Lord 1852, the aforesaid Richard Prosser came before  
 our said Lady the Queen in Her Chancery, and acknowledged the  
 memorandum of alteration aforesaid, and all and everything therein  
 contained and specified in form above written; and also the memorandum  
 20 of alteration aforesaid was stamped, according to the tenor of the Statute  
 made for that purpose.

Enrolled the Eighth day of May in the year of our Lord One  
 thousand eight hundred and fifty-two.

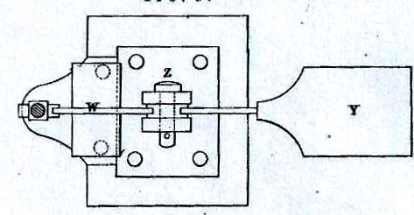
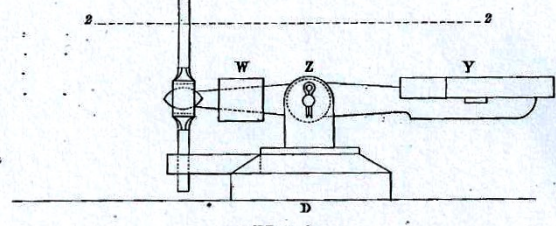
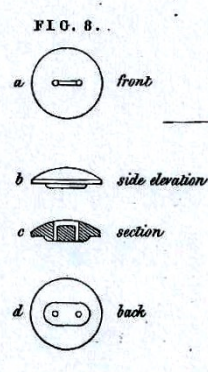
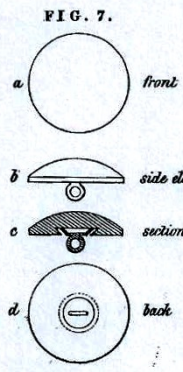
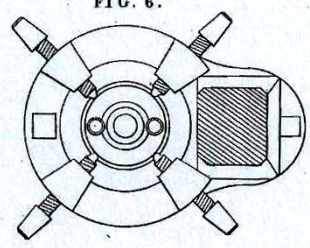
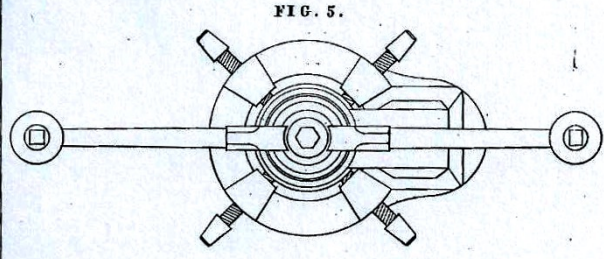
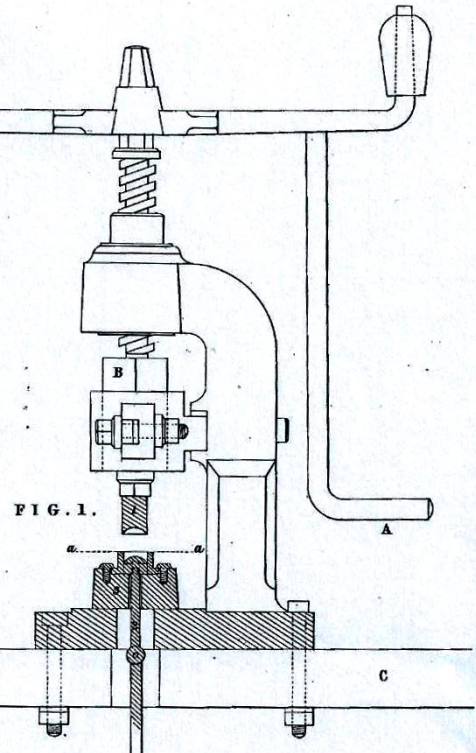
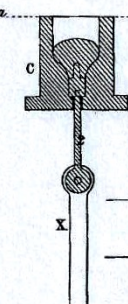
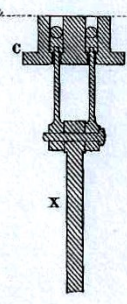
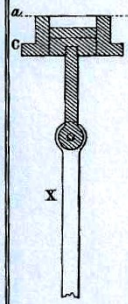
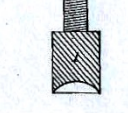
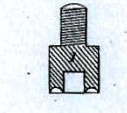
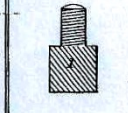
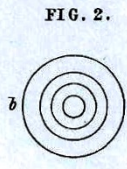
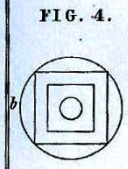
LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
 Printers to the Queen's most Excellent Majesty. 1853.

A.D. 1840. JUNE 17. N<sup>o</sup> 8548  
PROSSER'S SPECIFICATION.

(1 Sheet)

Sheet of Drawings referred to in  
Richard Prosser's Specification  
Patent dated 17 June 1840.



The Enrolled Drawing is Uncoloured