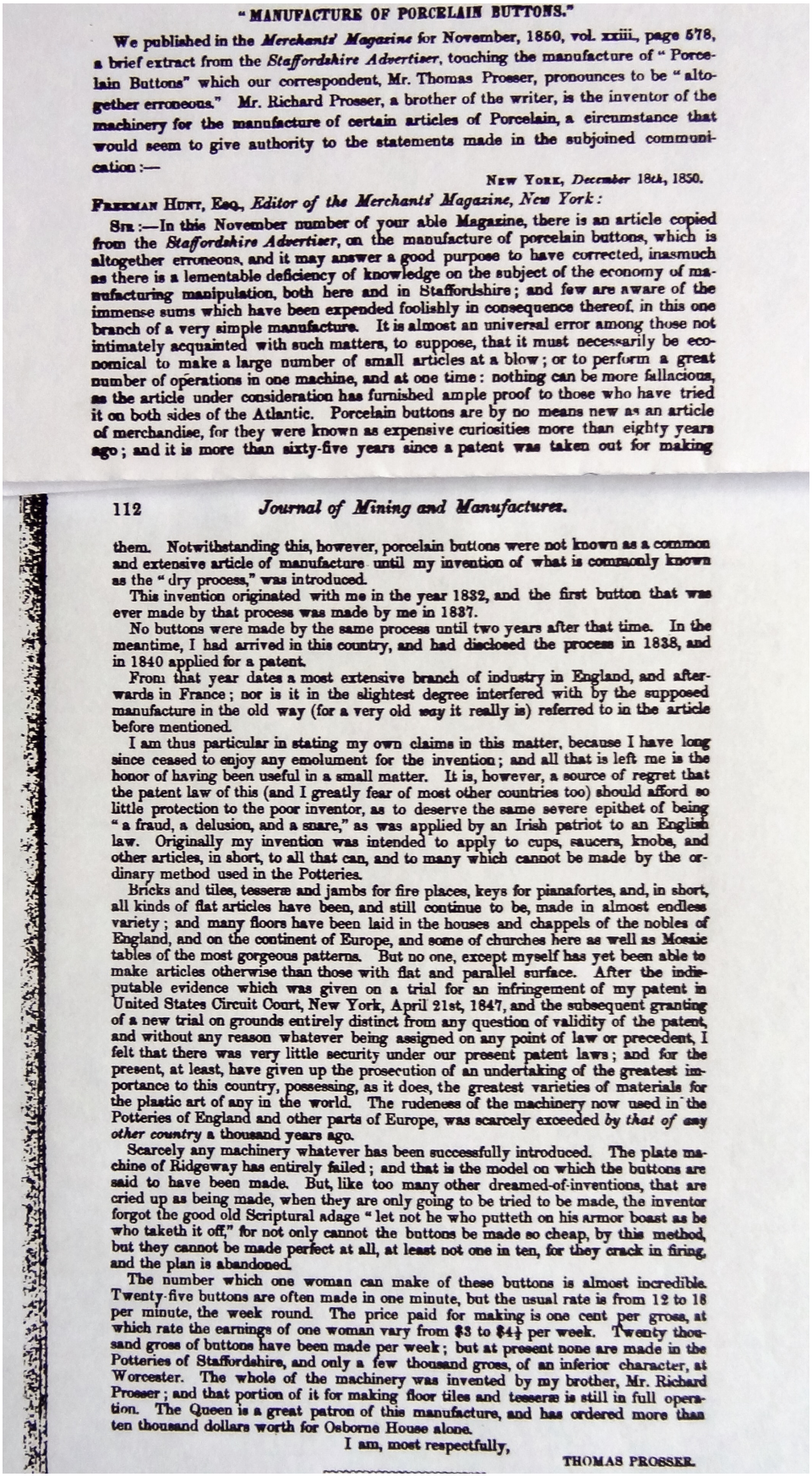
"Prosser's Patent" Agate Button Images



"MANUFACTURE OF PORCELAIN BUTTONS."

We published in the *Merchants' Magazine* for November, 1850, vol. xxiii., page 578, a brief extract from the *Staffordshire Advertiser*, touching the manufacture of "Porcelain Buttons" which our correspondent, Mr. Thomas Prosser, pronounces to be "altogether erroneous." Mr. Richard Prosser, a brother of the writer, is the inventor of the machinery for the manufacture of certain articles of Porcelain, a circumstance that would seem to give authority to the statements made in the subjoined communication:—

NEW YORK, *December 18th*, 1850.

FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, New York:*

SIR:—In this November number of your able Magazine, there is an article copied from the *Staffordshire Advertiser*, on the manufacture of porcelain buttons, which is altogether erroneous, and it may answer a good purpose to have corrected, inasmuch as there is a lementable deficiency of knowledge on the subject of the economy of manufacturing manipulation, both here and in Staffordshire; and few are aware of the immense sums which have been expended foolishly in consequence thereof, in this one branch of a very simple manufacture. It is almost an universal error among those not intimately acquainted with such matters, to suppose, that it must necessarily be economical to make a large number of small articles at a blow; or to perform a great number of operations in one machine, and at one time: nothing can be more fallacious, as the article under consideration has furnished ample proof to those who have tried it on both sides of the Atlantic. Porcelain buttons are by no means new as an article of merchandise, for they were known as expensive curiosities more than eighty years ago; and it is more than sixty-five years since a patent was taken out for making

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them. Notwithstanding this, however, porcelain buttons were not known as a common and extensive article of manufacture until my invention of what is commonly known as the "dry process," was introduced.

This invention originated with me in the year 1832, and the first button that was ever made by that process was made by me in 1837.

No buttons were made by the same process until two years after that time. In the meantime, I had arrived in this country, and had disclosed the process in 1838, and in 1840 applied for a patent.

From that year dates a most extensive branch of industry in England, and afterwards in France; nor is it in the slightest degree interfered with by the supposed manufacture in the old way (for a very old way it really is) referred to in the article before mentioned.

I am thus particular in stating my own claims in this matter, because I have long since ceased to enjoy any emolument for the invention; and all that is left me is the honor of having been useful in a small matter. It is, however, a source of regret that the patent law of this (and I greatly fear of most other countries too) should afford so little protection to the poor inventor, as to deserve the same severe epithet of being "a fraud, a delusion, and a snare," as was applied by an Irish patriot to an English law. Originally my invention was intended to apply to cups, saucers, knobs, and other articles, in short, to all that can, and to many which cannot be made by the ordinary method used in the Potteries.

Bricks and tiles, tesseræ and jambs for fire places, keys for pianafortes, and, in short, all kinds of flat articles have been, and still continue to be, made in almost endless variety; and many floors have been laid in the houses and chappels of the nobles of England, and on the continent of Europe, and some of churches here as well as Mosaic tables of the most gorgeous patterns. But no one, except myself has yet been able to make articles otherwise than those with flat and parallel surface. After the indisputable evidence which was given on a trial for an infringement of my patent in United States Circuit Court, New York, April 21st, 1847, and the subsequent granting of a new trial on grounds entirely distinct from any question of validity of the patent, and without any reason whatever being assigned on any point of law or precedent, I felt that there was very little security under our present patent laws; and for the present, at least, have given up the prosecution of an undertaking of the greatest importance to this country, possessing, as it does, the greatest varieties of materials for the plastic art of any in the world. The rudeness of the machinery now used in the Potteries of England and other parts of Europe, was scarcely exceeded *by that of any other country* a thousand years ago.

Scarcely any machinery whatever has been successfully introduced. The plate machine of Ridgeway has entirely failed; and that is the model on which the buttons are said to have been made. But, like too many other dreamed-of-inventions, that are cried up as being made, when they are only going to be tried to be made, the inventor forgot the good old Scriptural adage "let not he who putteth on his armor boast as he who taketh it off," for not only cannot the buttons be made so cheap, by this method, but they cannot be made perfect at all, at least not one in ten, for they crack in firing, and the plan is abandoned.

The number which one woman can make of these buttons is almost incredible. Twenty-five buttons are often made in one minute, but the usual rate is from 12 to 18 per minute, the week round. The price paid for making is one cent per gross, at which rate the earnings of one woman vary from $3 to $4½ per week. Twenty thousand gross of buttons have been made per week; but at present none are made in the Potteries of Staffordshire, and only a few thousand gross, of an inferior character, at Worcester. The whole of the machinery was invented by my brother, Mr. Richard Prosser; and that portion of it for making floor tiles and tesseræ is still in full operation. The Queen is a great patron of this manufacture, and has ordered more than ten thousand dollars worth for Osborne House alone.

I am, most respectfully,

THOMAS PROSSER.

Thomas Prosser's 1850 letter to the New York Merchants' Magazine

1. Del. for Thos. & 1. Del. to Lawyer

City of New-York, ss.

BE IT REMEMBERED.

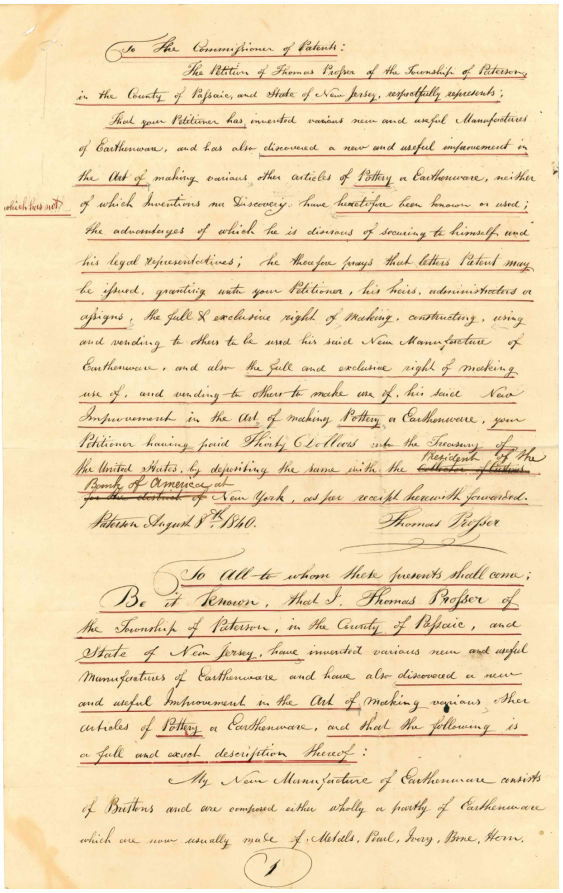
THAT Thomas Prosper

late of the UNITED KINGDOM OF GREAT BRITAIN AND IRELAND, appeared in the Marine Court of the City of New-York, held in the City Hall of the said City, on the twenty first day of June in the year of our Lord one thousand eight hundred and thirty-Eight (the said Court being a Court of Record, having Common Law Jurisdiction, and a Clerk and Seal,) and declared on Oath in open Court that it was bona fide his intention to become a Citizen of the United States, and to renounce, forever, all allegiance and fidelity to any foreign Prince, Potentate, State or Sovereignty whatsoever, and particularly to the Queen of the United Kingdom of Great Britain and Ireland.

In Testimony Whereof, the SEAL of the said MARINE COURT of the City of New-York is hereunto affixed, this 21st day of June in the year of our Lord one thousand eight hundred and thirty-Eight and of our Independence the Sixty-second

John Barberie Clerk.

21st June 1838 Thomas's Affidavit of his intention to adopt U.S citizenship
Courtesy of Jody Behrbohm



To the Commissioner of Patents:

The Petition of Thomas Prosser of the Township of Paterson in the County of Passaic, and State of New Jersey, respectfully represents;

That your Petitioner has invented various new and useful Manufactures of Earthenware, and has also discovered a new and useful improvement in the Art of making various other articles of Pottery & Earthenware, neither of which inventions nor Discovery have heretofore been known or used; the advantages of which he is desirous of securing to himself and his legal representatives; he therefore prays that Letters Patent may be issued, granting unto your Petitioner, his heirs, administrators & assigns, the full & exclusive right of making, constructing, using and vending to others to be used his said New Manufacture of Earthenware, and also the full and exclusive right of making use of, and vending to others to make use of, his said New Improvement in the Art of making Pottery & Earthenware, your Petitioner having paid Thirty Dollars into the Treasury of the United States, by depositing the same with the President of the Bank of America at the District of New York, as per receipt herewith forwarded.

Paterson August 8th 1840. Thomas Prosser

To All to whom these presents shall come;

Be it Known, that I, Thomas Prosser of the Township of Paterson, in the County of Passaic, and State of New Jersey, have invented various new and useful Manufactures of Earthenware and have also discovered a new and useful Improvement in the Art of making various other articles of Pottery & Earthenware, and that the following is a full and exact description thereof:

My New Manufacture of Earthenware consists of Buttons and are composed either wholly & partly of Earthenware which are now usually made of Metals, Pearl, Ivory, Bone, Horn,

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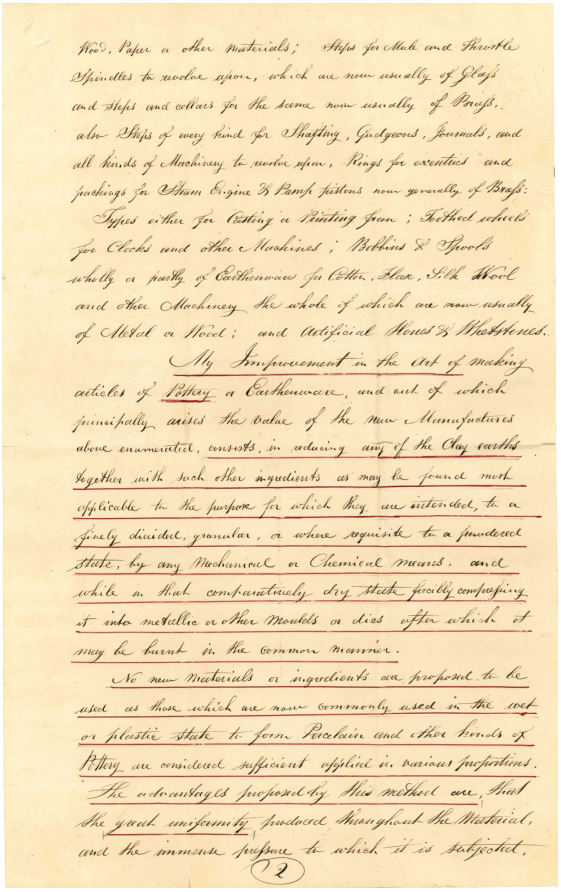

Wood, Paper & other materials; Steps for Mule and Throttle Spindles to revolve upon, which are now usually of Glass and Steps and collars for the same now usually of Brass; also Steps of every kind for Shafting, Gudgeons, Journals, and all kinds of Machinery to revolve upon, Rings for eccentrics and packings for Steam Engine & Pump pistons now generally of Brass; Types either for Casting & Printing from; Toothed wheels for Clocks and other Machines; Bobbins & Spools wholly & partly of Earthenware for Cotton, Flax, Silk Wool and other Machinery the whole of which are now usually of Metal & Wood; and Artificial Stones & Whetstones.

My Improvement in the Art of making articles of Pottery & Earthenware, and out of which principally arises the value of the new Manufactures above enumerated, consists, in reducing any of the Clay earths together with such other ingredients as may be found most applicable to the purpose for which they are intended, to a finely divided, granular, & where requisite to a powdered state, by any Mechanical or Chemical means, and while in that comparatively dry state forcibly compressing it into metallic or other moulds or dies after which it may be burnt in the common manner.

No new materials or ingredients are proposed to be used as those which are now commonly used in the wet or plastic state to form Porcelain and other kinds of Pottery are considered sufficient applied in various proportions.

The advantages proposed by this method are, that the great uniformity produced throughout the Material, and the immense pressure to which it is subjected,

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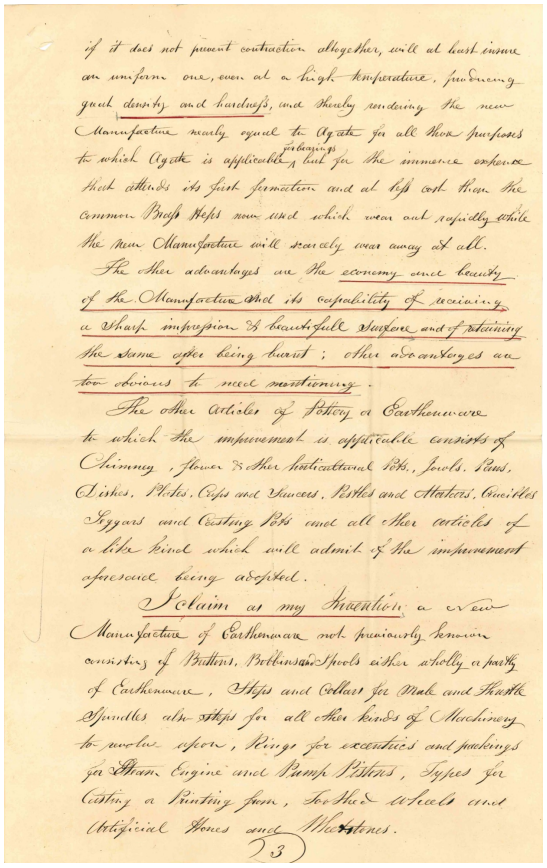


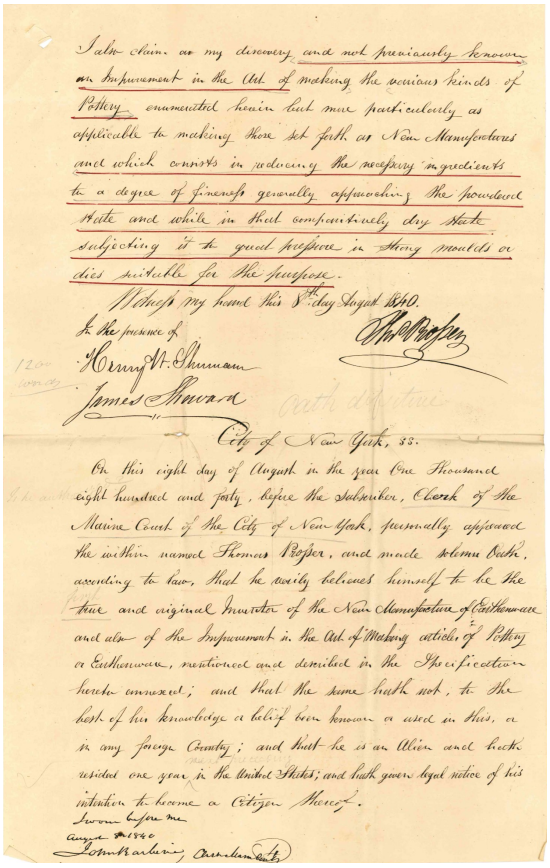
if it does not prevent contraction altogether, will at least insure an uniform one, even at a high temperature, producing great density and hardness, and thereby rendering the new Manufacture nearly equal to Agate for all those purposes to which Agate is applicable, but for the immense expense which attends its first formation and at less cost than the common Brass Steps now used which wear out rapidly while the new Manufacture will scarcely wear away at all.

The other advantages are the economy and beauty of the Manufacture and its capability of receiving a sharp impression & beautifull Surface and of retaining the same after being burnt; other advantages are too obvious to need mentioning.

The other Articles of Pottery & Earthenware to which the improvement is applicable consists of Chimney, Flower & other Horticultural Pots, Jewels, Pans, Dishes, Plates, Cups and Saucers, Pestles and Mortars, Crucibles Jiggers and Casting Pots and all other articles of a like kind which will admit of the improvement aforesaid being adopted.

I claim as my Invention a new Manufacture of Earthenware not previously known consisting of Buttons, Bobbins & Spools either wholly & partly of Earthenware, Steps and Collars for Mule and Throttle Spindles also Steps for all other kinds of Machinery to revolve upon, Rings for eccentrics and packings for Steam Engine and Pump Pistons, Types for Casting & Printing from, Toothed wheels and Artificial Stones and Whetstones.

3



I also claim as my discovery and not previously known an Improvement in the Art of making the various kinds of Pottery enumerated herein but more particularly as applicable to making those set forth as New Manufactures and which consists in reducing the necessary ingredients to a degree of fineness generally approaching the powdered state and while in their comparatively dry state subjecting it to great pressure in strong moulds or dies suitable for the purpose.

Witness my hand this 8th day August 1840.

In the presence of

Thos Prosser

Henry W. Sherman

James Shepard

City of New York, ss.

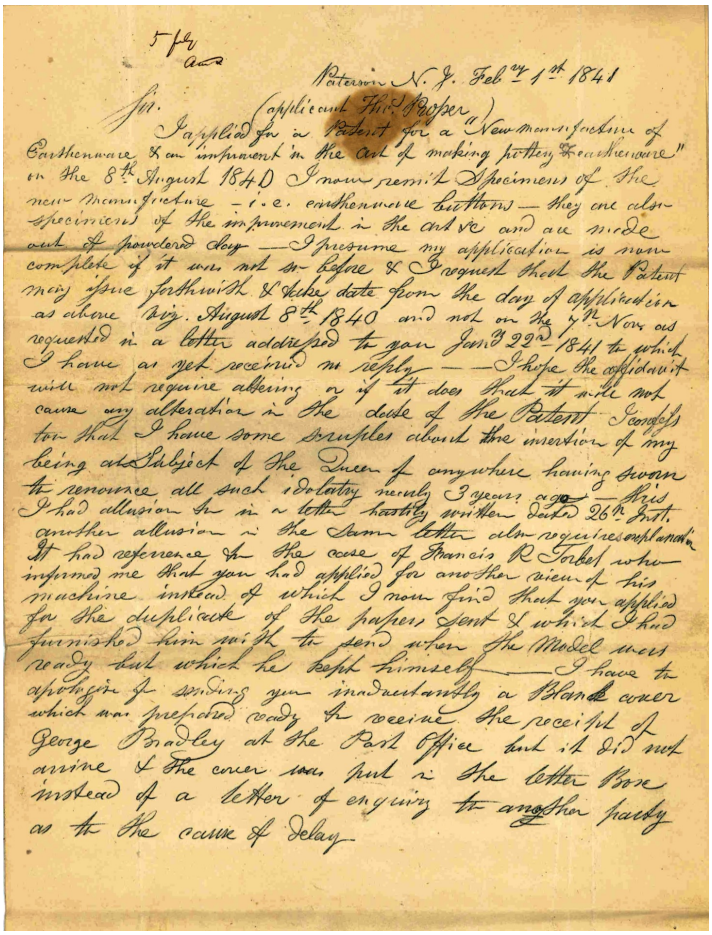
On this eight day of August in the year One Thousand eight hundred and forty, before the Subscriber, Clerk of the Marine Court of the City of New York, personally appeared the within named Thomas Prosser, and made solemn Oath, according to law, that he verily believes himself to be the true and original Inventor of the New Manufacture of Earthenware and also of the Improvement in the Art of Making articles of Pottery & Earthenware, mentioned and described in the Specification hereto annexed; and that the same hath not, to the best of his knowledge & belief been known & used in this, or in any foreign Country; and that he is an Alien and hath resided one year in the United States; and hath given legal notice of his intention to become a Citizen thereof.

Sworn before me

August 8th 1840

John Barbier, Commissioner

8th August 1840 Thomas's first dust-pressed patent application
U.S. National Archives



Paterson N. J. Feb^{y} 1st 1841

Sir. (Applicant Thos Prosser)

I applied for a Patent for a "New manufacture of Earthenware & an improvement in the art of making pottery & earthenware" on the 8th August 1840 I now remit Specimens of the new manufacture - i.e. earthenware buttons — they are also specimens of the improvement in the art &c and are made out of powdered clay — I presume my application is now complete if it was not so before & I request that the Patent may issue forthwith & bear date from the day of application as above viz. August 8th 1840 and not on the 7th Nov^{r} as requested in a letter addressed to you June 22nd 1841 to which I have as yet received no reply — I hope the affidavit will not require altering or if it does that it will not cause any alteration in the date of the Patent I am led to for that I have some scruples about the insertion of my being a Subject of the Queen of any nature having sworn to renounce all such idolatry nearly 3 years ago this I had allusion to in a letter hastily written dated 26th Feb^{y} another allusion in the same letter also requires explanation It had reference to the case of Francis R Forbes who informed me that you had applied for another viem of his machine instead of which I now find that you applied for the duplicate of the papers sent & which I had furnished him with to send when the Model was ready but which he kept himself — I have to apologize for sending you inadvertantly a Blank cover which was prepared ready to receive the receipt of George Bradley at the Post Office but it did not arrive & the cover was put in the letter Box instead of a letter of enquiry to another party as the cause of delay

I sent but one copy of my application of the 8th August 1840 - if that copy is correct & you will be pleased to have a duplicate made I will remit the cost on application — or if you must have any alteration made I will remit you for both as above stating that I may thereby insure as little loss of time as possible as it may now be a matter of great importance that my Patent take date as early as possible —

(George Bradley applicant)

I have received yours of the 25th inst^{t} acknowledging the rect of petition, specification and Drawings of Steam propeller Ballance but do not mention the Model N^{o} 210 which was deposited with the collector at New York the same day that the papers were Mailed — the reciept of deposit was mailed here on the 26th & I am anxious to have your acknowledgement of their safe arrival

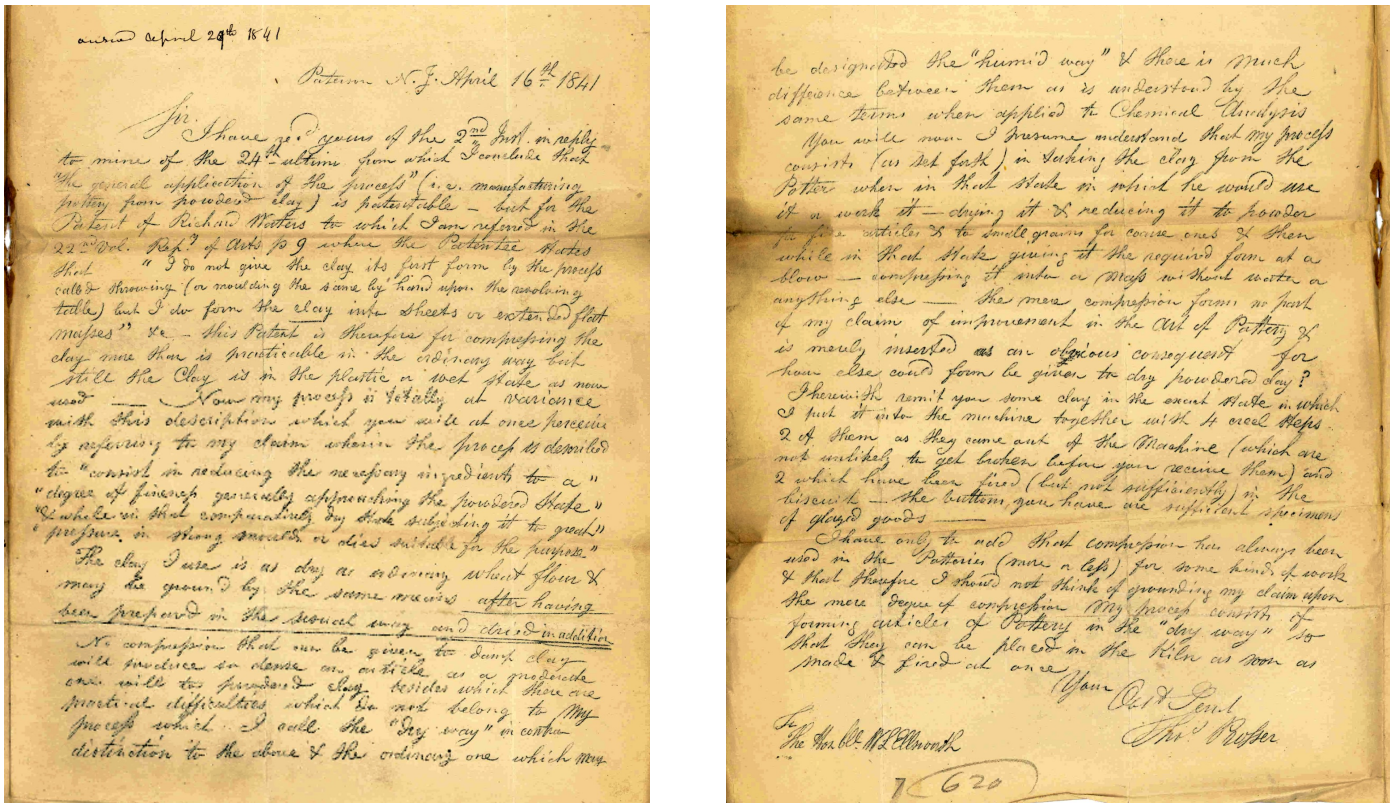
I am Sir respectfully

Thos Prosser

To The Hon. W. L. Ellsworth
Commissioner of Patents

P.S. The Specimens herewith are merely to complete my application for a Patent & not for the purpose of placing in the Great Hall — Mr Ellsworth requested me to furnish Specimens for the great Hall which I will take the earliest opportunity of doing as handsomely as the little experience that I have had of the application of the invention will enable me to do &c

Thomas's letter dated 1st February 1841 to U.S. Patent Office



answ^{d} April 29th 1841

Paterson N. J. April 16th 1841

Sir, I have yo^{r} favors of the 2nd inst. in reply to mine of the 24th ultimo from which I conclude that "the general application of the process" (i.e. manufacturing pottery from powdered clay) is patentable — but to the Patent of Richard Waters to which I am referred in the 22nd Vol. Repr^{y} of Arts p 9 where the Patentee states that "I do not give the clay its first form by the process called throwing (or moulding the same by hand upon the revolving table) but I do form the clay into sheets or extended flat masses" &c — this Patent is therefore for compressing the clay more than is practicable in the ordinary way but still the clay is in the plastic or wet state as now used — Now my process is totally at variance with this description which you will at once perceive by referring to my claim wherein the process is described to "consist in reducing the necessary ingredients to a" "degree of fineness generally approaching the powdered state" "& while in that comminuted dry state subjecting it to great" "pressure in strong moulds or dies suitable for the purpose."

The clay I use is as dry as ordinary wheat flour & may be ground by the same means after having been prepared in the usual way and dried in addition

No compression that can be given to damp clay will produce so dense an article as a properly made one will be from powdered clay, besides which there are practical difficulties which do not belong to my process which I call the "Dry way" in contra distinction to the above & the ordinary one which may be designated the "humid way" & there is much difference between them as is understood by the same terms when applied to Chemical Analysis

You will now I presume understand that my process consists (as set forth) in taking the clay from the Potter when in that state in which he would use it at work it — drying it & reducing it to powder in fine articles & to small grains for coarse ones & then while in that state giving it the required form at a blow — compressing it into a mold without water or anything else — the mere compression forms no part of my claim of improvement in the Art of Pottery & is merely inserted as an obvious consequent for how else could form be given to dry powdered clay?

Herewith I remit you some clay in the exact state in which I put it into the machine together with 4 vessels 2 of them as they came out of the Machine (which are not unlikely to get broken before you receive them) and 2 which have been fired (but not sufficiently) in the biscuit — the buttons you have are sufficient specimens of glazed goods —

I have only to add that compression has always been used in the Potteries (more or less) for some kinds of work & that therefore I should not think of grounding my claim upon the mere degree of compression My process consists of forming articles of Pottery in the "dry way" so that they can be placed in the Kiln as soon as made & fired at once

Your Obt Servt

Thos Prosser

To The Hon. W. L. Ellsworth

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Thomas's letter dated 16th April 1841 to U.S. Patent Office

All images: U.S. National Archives

To all whom it may concern:

Be it known that I, Thomas Prosser, of the town of Paterson, in the county of Passaic, and State of New Jersey, Civil Engineer and Architect, have invented a new and useful improvement in the manufacture of Buttons, and I do hereby declare that the following is a full and exact description thereof:

My improvement in the Manufacture of Buttons consists, firstly, in making them of materials not heretofore used for, or applied to that purpose, to wit, such clay earths or other earthy materials and metallic oxides, as are now commonly used by Potters in the manufacture of domestic earthenware: and secondly, in making them in metallic moulds; in which the materials are compressed with considerable force, by means of a common fly screw-press or any other suitable mechanical contrivance, after being reduced to a fine powder.

The pressure given must be sufficient to cause the powdered clay to cohere and retain the form of the button which is impressed upon it in the mould, after which it is to be fired and glazed in the Potter's kiln in the usual manner, and also painted or printed similar to ordinary porcelain if required; such buttons as have holes in them for the purpose of sewing them on to clothing are then complete, but those requiring shanks of metal, have them stuck into a recess made in the button for that purpose, by means of shell lack or other cement; or they are attached to a shell which covers the whole of the back of the button and turns a little over the front — the front of the button only appearing set in a metallic frame or shell at the back of which is the shank.

What I Claim as my Invention, and desire to secure by Letters Patent, is [redacted] the manufacture of Buttons [redacted] of compressed clay or other earthy materials as set forth. Witness my hand this 30th Day of June 1841

blistered
alined
T.P.
† above mentioned consisting
† formed

In the presence of
Witnesses
George Bradley
James Bradley

Thomas Prosser

2

30th June 1841 Thomas's much reduced final U.S. patent application
U.S National Archives

UNITED STATES PATENT OFFICE.

THOMAS PROSSER, OF PATERSON, NEW JERSEY.

IMPROVEMENT IN THE MANUFACTURE OF BUTTONS.

Specification forming part of Letters Patent No. **2,199**, dated July 29, 1841; antedated January 29, 1841.

To all whom it may concern:

Be it known that I, THOMAS PROSSER, of the town of Paterson, in the county of Passaic and State of New Jersey, civil engineer and architect, have invented a new and useful Improvement in the Manufacture of Buttons; and I do hereby declare that the following is a full and exact description thereof.

My improvement in the manufacture of buttons consists, first, in making them of materials not heretofore used for or applied to that purpose—to wit, such clay-earths or other earthy materials and metallic oxides as are now commonly used by potters in the manufacture of domestic earthenware; and, secondly, in making them in metallic molds, in which the materials are compressed with considerable force by means of a common fly screw-press, or any other suitable mechanical contrivance, after being reduced to a fine powder.

The pressure given must be sufficient to cause the powdered clay to cohere and retain the form of the button which is impressed upon it in the mold, after which it is to be fired and glazed in the potter's kiln in the usual manner, and also painted or printed similar to ordinary porcelain, if required. Such buttons as have holes in them for the purpose of sewing them on the clothing are then complete; but those requiring shanks of metal have them stuck into a recess made in the button for that purpose by means of shellac or other cement; or they are attached to a shell which covers the whole of the back of the button and turns a little over the front, the front of the button only appearing set in a metallic frame or shell, and at the back of which is the shank.

What I claim as my invention, and desire to secure by Letters Patent, is—

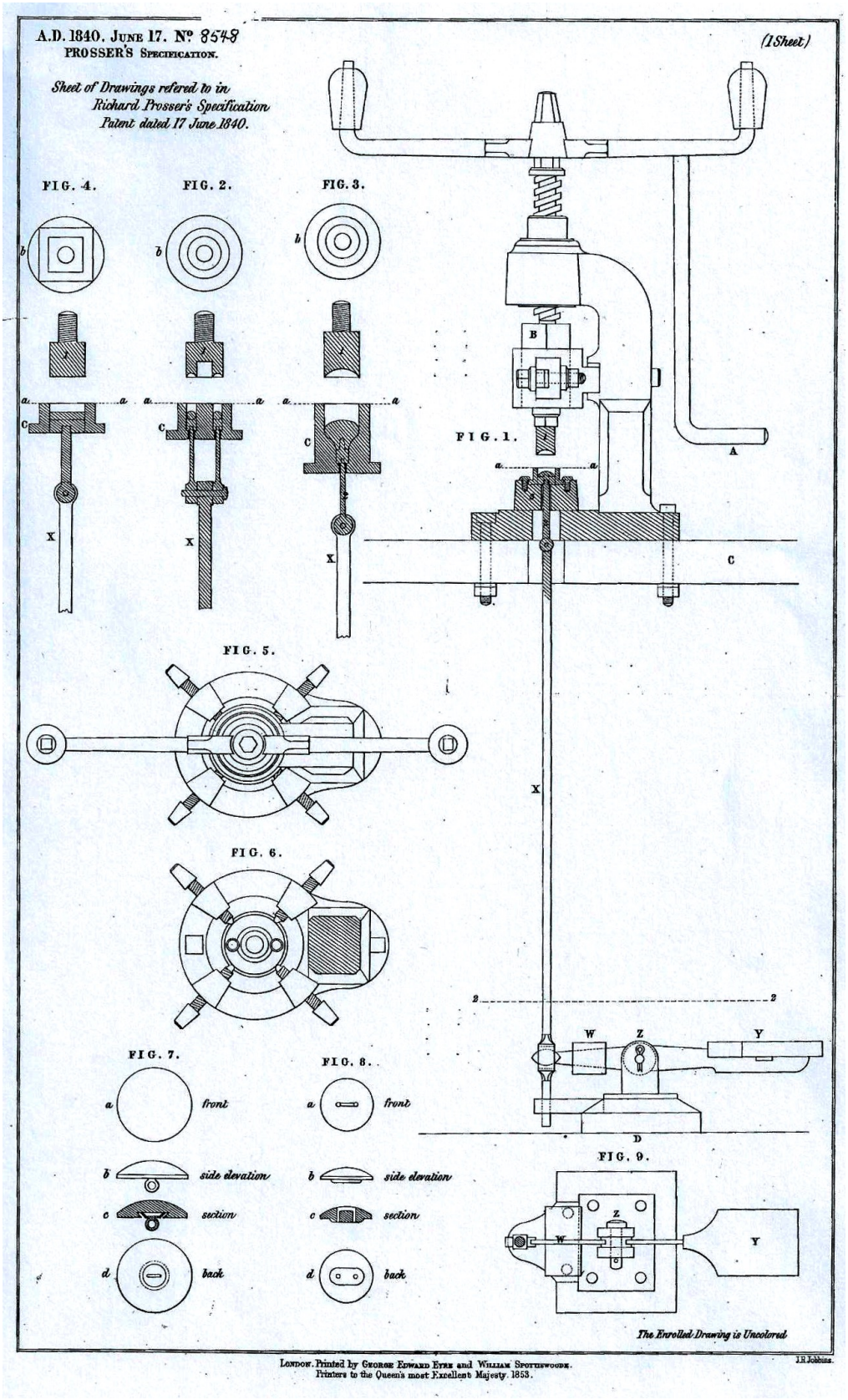
The manufacture above mentioned, consisting of buttons formed of compressed clay or other earthy materials, as set forth.

Witness my hand this 30th day of June, 1841.

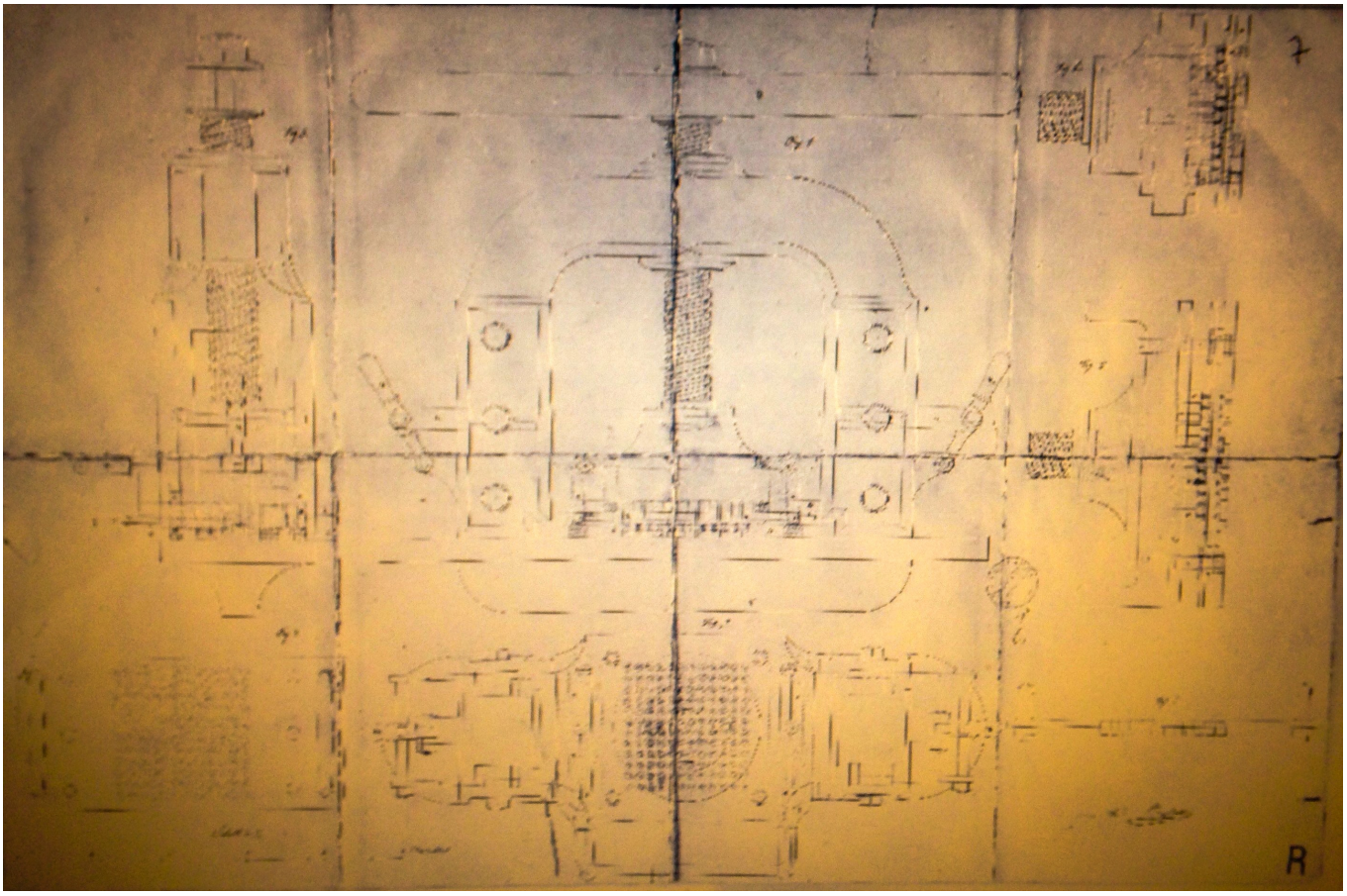
THOMAS PROSSER.

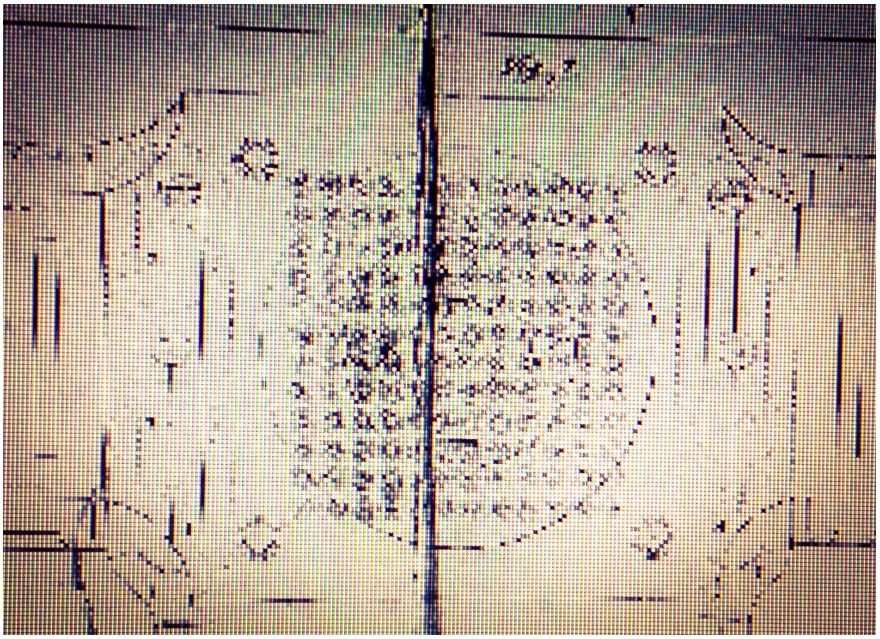
Witnesses:
GEORGE BRADLEY,
JAMES BRADLEY.

Thomas's Patent antedated to 29th January 1841
U.S National Archives



17th December 1840: the drawing in the enrolled specification of Richard's patent dated 17th June 1840 (for the full specification see the PDF in The Patents link on the Menu bar).
UK Intellectual Property Office





Drawing from Bapterosses's Patent No. 1BB341 dated 4th November 1844 with a close up left of the 144 button die.
INPI French website

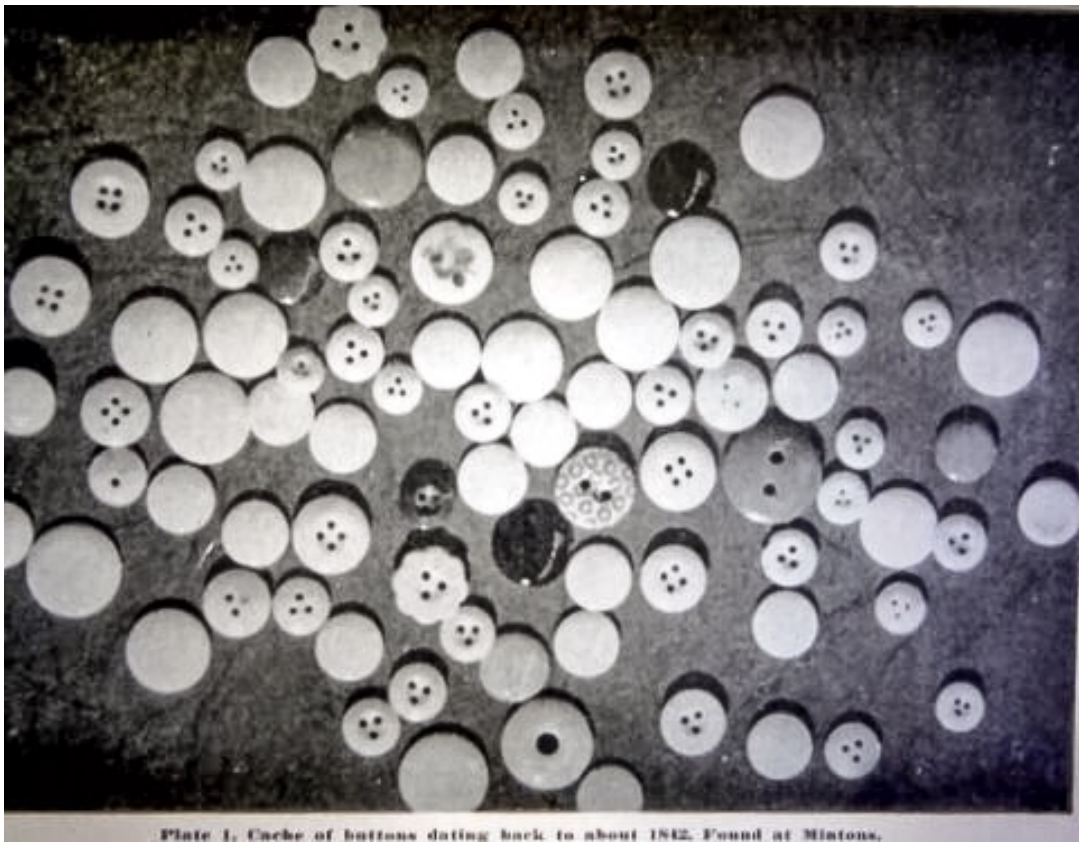
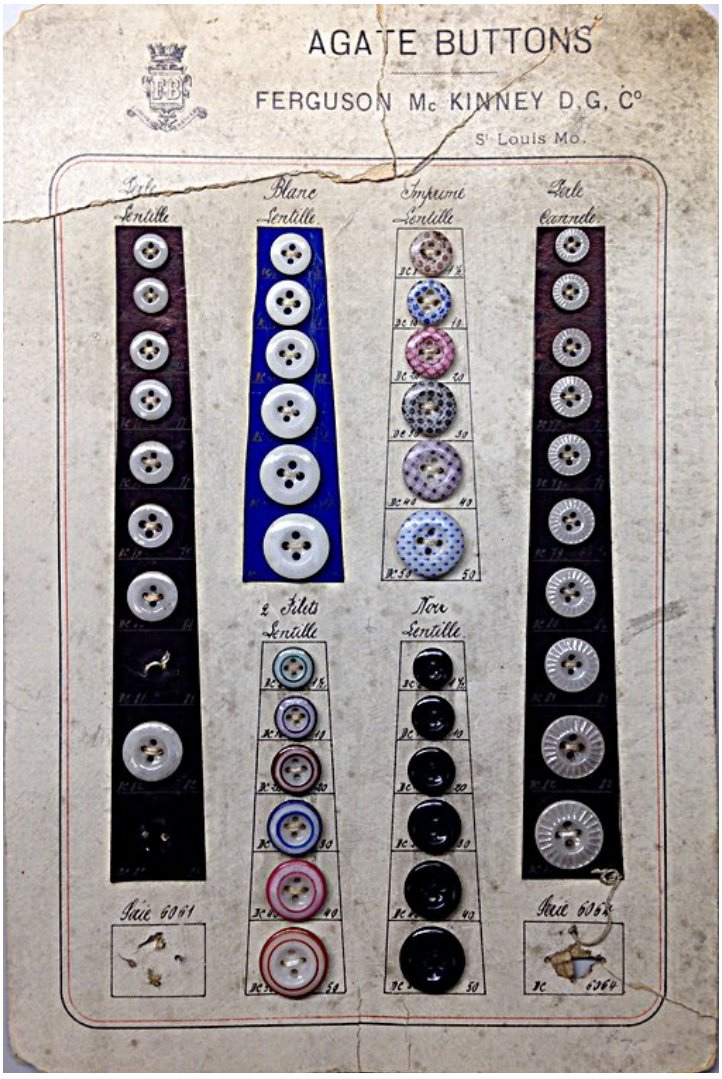


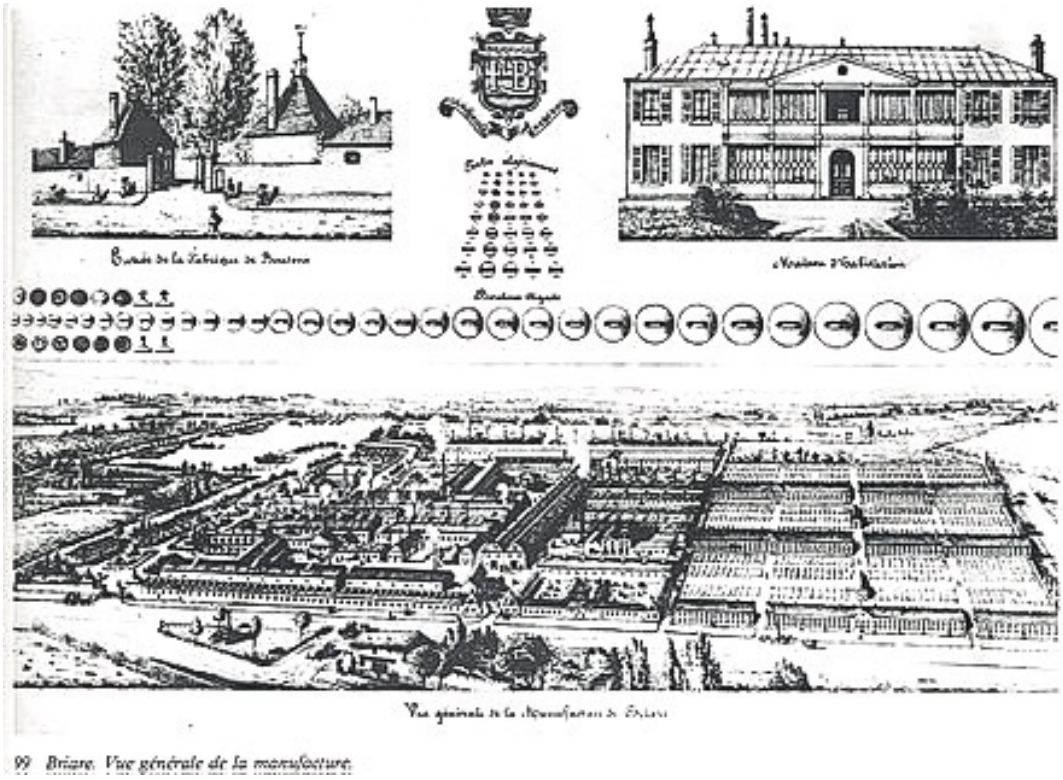
Plate 1. Cache of buttons dating back to about 1862. Found at Mintons.

The only known image of Minton's (Richard) "Prosser's Patent Agate Buttons" *NBS National Button Bulletin dated March 1952*



Early sample card of Bapterosses's buttons *Courtesy of Judy Behrbaum*

Bapterosses buttons c1850 - *Wikipedia*

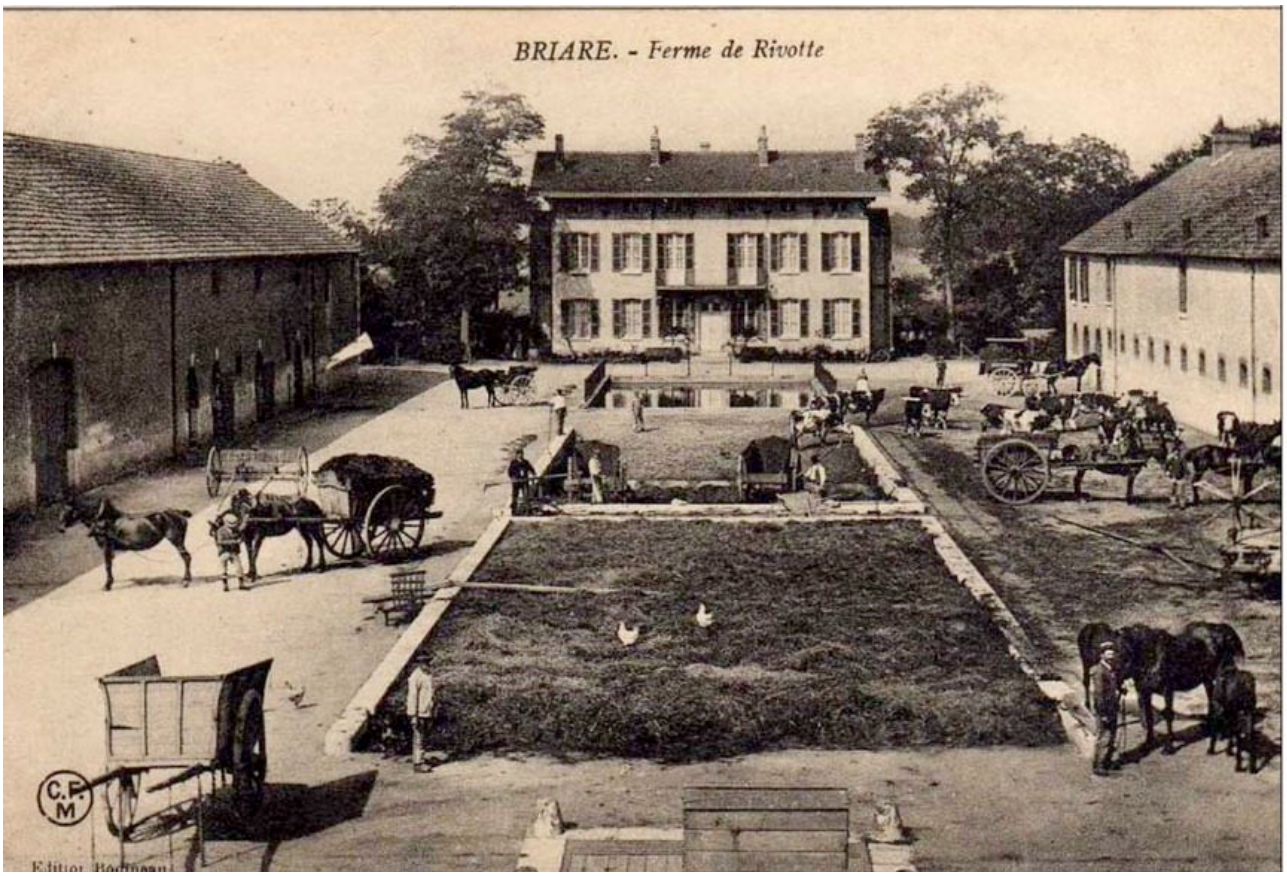


99 *Briare. Vue générale de la manufacture.*

Bapterosses's factory Briare c1875 - *Wikipedia*

Bapterosses's factory Briare with workers' housing in foreground

Briare canal with Bapterosses's factory in background



Bapterosses's farm for the dairy herd for the milk for the button manufactory

Jean-Felix Bapterosses (1813 - 1885) - photograph presumably taken in his last decade; 10,000 people were said to have attended his funeral.