

the other, is to be further strengthened by having the hoops before mentioned, 5 inches broad, and $\frac{3}{8}$ ths of an inch thick, placed round it at intervals $1\frac{1}{2}$ foot apart from each other throughout. These hoops, for the thick part of the mast, are to be made each of two semi-hoops, with ends turned out, pierced, and tapped, for the admission of strong screws, by which they are to be drawn together tightly; but the hoops for the smaller and tapering parts, at the ends, are to be of the common kind, and when in their proper positions, are to be put on in the usual manner. It will easily be understood that the rule for arranging the ends of the pieces of balk for the core, will also apply to those of the surrounding outside pieces, and that they are to be coaked together, both endways and sideways, in a similar manner, and to have their ends placed in the line of the hoops as before mentioned. The patentee states that scarfs may be also used for connecting the ends of the pieces of balk, but that he does not recommend this method, thinking that by the coaks preferable.

The timber used for making these masts, is directed to be well dried and seasoned before the pieces are put together; the holes for the trennels, and for the coaks, and the trennels and coaks themselves, are also recommended to be well painted, or coated with coal tar, previous to this operation.

The directions for making masts of the same sort, under 53 inches diameter, are nearly word for word the same as those already stated, and are repeated throughout in the specification. We shall, however, only notice the difference between the two methods, to avoid the needless tediousness of the other mode of explanation. To calculate the size of the balk for these smaller masts, the diameter of each is to be divided by 3, which will give the measure of the side of each piece. The iron hoops for them are to be of the same breadth as for the others, but are only to be $\frac{3}{8}$ th of an inch in thickness, and the pieces of balk are to be fastened together likewise in the same manner, with trennels, bolts and coaks; but an extraordinary direction is given for the dimensions of the coaks for joining the ends of the pieces of balk, which coaks for those smaller masts are ordered to be "3 feet" long, and 5 inches in diameter, which we suppose to be caused by some mistake, either of the patentee, or of the person who engrossed the specification.

FRENCH PATENTS.

Brevet d' invention for fifteen years granted to MADAME CHAUVEAU, of Montlovis, Widow, for a new manner of manufacturing rice from potatoes. Dated August 1, 1805.

The potatoes after being taken out of the water, (in which they have been boiled, we suppose,) are left to drain for a night, after which they are taken in masses, and forcibly passed through a brass colander or sieve, held above a tin plate or tray, having a border round it about an inch high. The substance of the potatoes pressed

through the colander, falls like snow, on the tin tray, and is permitted to fill it as high as the top of the border.

The trays filled in this manner are carried to an oven, which should be equally hot as for bread. When the substance is done enough will be known by its becoming detached from the trays; then it is to be drawn from the oven, and beaten a little in a large mortar; and when it is reduced to bits about the thickness of a macaroon, it is to be passed into a mill of the sort used in making snuff, where the pieces are divided unequally. The matter having undergone this sort of grinding, is passed through different sieves, to divide it into rice of three species of thickness, and into rice flour.

The idea of preparing potatoes in this manner, originated, we believe, with M. Pictet, of Geneva. In the Journal of the Lyceum of Arts of Paris, in 1796, M. Grenet, has given an account of a good process for obtaining granulated potatoes, copied from that of the professor mentioned, and has described a very convenient apparatus for the purpose; a print of which, with a translation of the account of the process, will be found in the third volume of our first series.

The process might be advantageous for preparing a useful and wholesome article for sea store, that would keep better than common potatoes, and not be liable to vegetate; but as for the notion of converting potatoes into rice, or into flour, or into any thing else extraneous to their nature, which has been so often proposed, we believe it to be entirely chimerical, and either to originate in self-deception, or in a culpable intention of adulterating rice with an article made to resemble it in some respects, but which possesses nothing of its delicacy and freedom from flavour, and contains much more mucilaginous matter, and much less of a farinaceous nature.

We think M. Grenet's process, in all respects better than that of Madame Chauveau, except as regards the baking; though it is most probable that a stove would dry the granulated potatoes better than any oven, and with much less risk of either burning or scorching them.

[*Repertory of Patent Inventions.*]

To JAMES BUTLER, of the Commercial-road, in the parish of Lambeth, in the county of Surry, for his New Invented Method of making Coffins, for the effectual prevention of Bodies being removed therefrom after Interment.

This invention appears to be not a new method of making coffins, but a peculiar mode of fastening on the lid after the body has been introduced into the coffin, which the specification states to be "a new method of so effectually securing a coffin, that when the lid is fixed down by an original screw, it cannot be withdrawn, or the body abstracted."

The interior of the coffin is to be lined or bound with plates or ribs of iron, and in the lower part of the coffin within, there are to be holes with screw threads tapped in them. The lid having been placed upon the coffin, long screws are introduced into counter sunk holes;

and passing through the lid, and through holes in the side ribs, down to the bottom of the coffin, enter into the tapped holes above mentioned, by which means the lid is secured to the bottom.

But the particular feature of the invention is the fastening screws, the heads of which are made with a screw thread, tapped, in place of the cut or slit usually made in the head of a screw. Instead, therefore, of applying an ordinary screw driver to wind the screws into the holes, a winch or lever is screwed into the thread in the head of the screw, and by that means the screw is driven down to its intended bearing, (that is, until the head is bedded in the counter sunk hole of the lid;) and when the lid has been thus made fast, the winch or lever being turned the contrary way, comes out of the head, and leaves the screw fast in the coffin.

The head of the screw having been case hardened, a cut or cross groove cannot be afterwards made in it, so as to allow of the screw being turned the contrary way, neither can any instrument be introduced to withdraw it, as the edge of the iron plate into which the head is imbedded, effectually prevents it from being taken hold of. Enrolled, October, 1825.

To WILLIAM HURST and JOHN WOOD, both of Leeds, in the county of York. Manufacturers, for their invention of certain improvements in Cleaning, Milling, or Fulling Cloth.

These improvements consist in employing steam in the operation of fulling or milling woollen cloths, instead of soap and water, as heretofore. The machinery is the same as the ordinary stock used for fulling, into which the cloth is to be put and beaten, and turned over as usual; but in place of the soap and water commonly employed for wetting the cloth, a pipe, leading from a steam boiler, is introduced into the back or side of the stock, and the steam is made to blow through a number of small holes, so as to insinuate itself among the cloth, which by that means becomes thoroughly wetted, and all dirt and greasy materials are effectually driven out of the cloth by the steam.

As in this process the presence of water is objectionable, a waste pipe is placed in the bottom of the stock, to carry off the condensed steam. By these means the steam enters into all the folds and meshes of the cloth, and completely supersedes the necessity of soap, which effects a very considerable saving in the process, and allows it to be conducted with greater ease than by the old method. Enrolled, September, 1825.

MECHANICAL JURISPRUDENCE, No. VIII.

BY PETER A. BROWNE, ESQ.

On the Law of Patents for New and Useful Inventions.

Letters patent, *Litære patentæ*, are writings of the executive power, sealed with the seal of state, whereby persons have authority to do or enjoy that, which they otherwise could not.