9362X

L. H. Maus,

Casting Hollow-ware.

Patented Feb. 5, 1836.

Fig: 1.

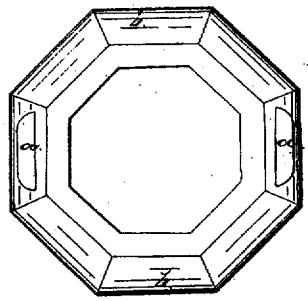


Fig: 2.

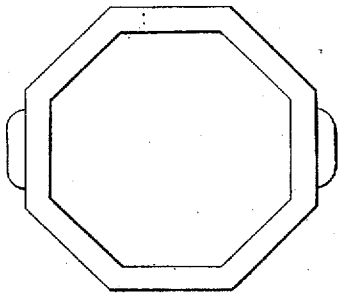


Fig: 3.

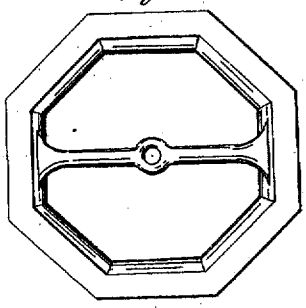


Fig: 6.

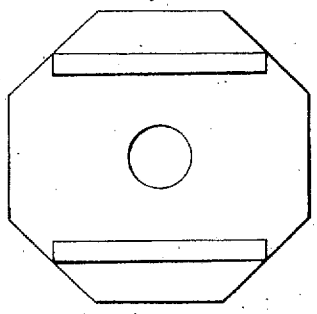
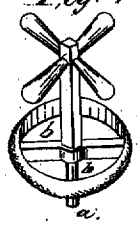


Fig: 7.



Fig: 4.



Witnesses:

Lyman Sholes

Inventor:

Lewis H. Maus

1

9362X

Feb 5, 1836

Louis H. Mann Danville Pennsylvania

Sellers Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Louis H. Mann himself of his improvement in making flasks and hooks for casting iron pipe.

To all to whom these Presents shall come. Be it known that I Louis H. Mann of Danville in the County of Columbia and State of Pennsylvania have invented a new and useful mode and plan in making and forming flasks & pallions and moulding iron hollow ware such as the taken pipe, Cane pans, Tea kettles, and all other kinds of iron hollow ware which requires the mouth to be smaller than the body or with a rim or flange to the mouth and that the following is a full and exact description thereof. — Specification —

The great loss has been sustained by those engaged in the making of iron hollow ware arising from the manner of moulding the same with flallions cut through centrally, and the use of flasks cut in the same way with iron chucks. To obviate this difficulty and loss &c I have invented the following. 1st The flasks to be made of either (wood or iron without iron chucks) cut horizontally in two places so as to make three distinct pieces with (handles in the cope and middle piece) the drag to be made with a bar across it and a hole in the middle of the bar to receive the end of the anchor. the cope middle piece and drag of the flask to be joined by (Dowels and fastened with hooks & eyes) 2nd an anchor made of iron with a ring near the one end & three openings in the said ring for the purpose of pulling the sand through to form the core. this anchor to fit the core with when formed. 3d But one flallion is required to form both the inside and outside of the core to be cut. the flallion to be cut in two places. the widest & narrowest part so as to form the distinct pieces when the pipe or hollow ware with a rim or flange are to be moulded. but if ware without a

2

9362X

Feb 5, 1836

rim or flanges such as the kettle glue pots are to be moulded. Then the pattern is only to be cut in the widest place. Use moulding with this instrument and place the piece of the pattern for the forming the bottom of the pot or kettle on a board or iron plate outside or bottom upwards and place the case and flask over the bottom piece of the pattern. The pot for pots and things to pour the metal through to be finished in the usual way. Then fill one half part of the flask full of sand as then place a board or iron plate on the flask and turn it upside down. Then remove the first board or iron plate and put on the surface of the sand turned up from dry sand called parting sand. Then put on the middle piece of the pattern and if moulding a tea kettle or pot without a rim or flange. Fill up the outside with sand pattern put on the middle piece of the flask but if moulding a pot with rim or flange. That part of the pattern which forms the rim or flange is to be put on at the same time the second or middle piece of the pot-tern is put on and rammed up with sand on the outside of the pattern. Then place the anchor in the bar of standing or cast piece of the flask and put a key in the pot of the anchor and put it in place inside of the pattern. Then run up the core with sand through the opening in the rim of the cover until it is filled even with the upper surface of the casting. Then put on dry parting sand. Then fill and run up the flask full of sand and take out the key which fastens the foot of the part of the anchor in the bar of the casting. Then lay on the bottom board or iron plate and turn the flask upside down on this board or iron plate which has a vent hole in the centre. Then lift off the cope of the flask first and the bottom part or piece of the pattern and insert a knife into the hole in the square end of the anchor and lift out the iron which is place for security in a stand or plinth with a hole in it to receive the square ends of the anchor. Then lift out the round or middle piece of the pattern and take off the middle piece of the flask. Then lift off the part of the pattern which forms the rim or flange of the moulding a pot. Then replace the middle piece of the flask which is true. Then replace the Cope or last piece of the flask turned

3

9362x

Feb 5, 1836

[illegible] mould in which the whole is cast for making the [illegible]
al. By my improvement and plan of save labour and expence [illegible]
persons many patterns. one pattern being only required whereas the plan
now used requires two patterns one to form the mould and one the mould
of the cavity to be cast. My plan also simplifies the moulding. a boy of
sixteen years of age of common capacity will learn to mould on my plan
in a week's time whereas the attempt whereas with the old plan
it requires men of experience to whom high wages are paid. my plan
is more certain to cast perfect ware. I have not been able to be exact
and as frequently happens with the practical machanic. I also gain by
being able to use quality of sand of less weight and of the same kind of mate-
rial can be made on the old plan. according to the plan now used for making
pots the iron cheeks of the flask comes in contact with the sides of the pot
as it lifts and handles the metal which requires the ware to be made heavy
and thick to prevent its cracking and even with this precaution frequently breaks with the most careful handling causing great loss and
disappointment. my plan having no cheeks, no such effect is produced
every part of the ware of the same thickness and much lighter without danger
of breaking by handling. ware made in the old way has a vertical ridge
or fin on each side caused by the iron cheeks of the flask. my plan makes
the sides of the ware perfectly smooth and free from all ridges or fins

Witness
David Ritchie
Jas S Ritchie

Pineville Columbia County Pennsylvania
December 26th 1835
Isaac N. Mills

Ex.
1836

109 words

Drawings