

The United States of America.

TO ALL TO WHOM THESE Letters Patent SHALL COME:

Whereas Elijah Brady a citizen of the United States hath alleged that he has invented a new and useful improvement

in constructing Bellows or Blowing machines

which improvement he states has not been known or used before his application; hath made oath that he does verily believe that he is the true inventor or discoverer of the said improvement; hath paid into the treasury of the United States the sum of thirty dollars, delivered a receipt for the same, and presented a petition to the Secretary of State, signifying a desire of obtaining an exclusive property in the said improvement, and praying that a patent may be granted for that purpose. These are therefore to grant, according to law, to the said Elijah Brady his heirs, administrators or assigns, for the term of fourteen years, from the third day of April one thousand eight hundred and twenty eight, the full and exclusive right and liberty of making, constructing, using and vending to others to be used, the said improvement; a description whereof is given in the words of the said Elijah Brady himself, in the schedule hereto annexed, and is made a part of these presents.

In Testimony whereof, I have caused these Letters to be made Patent, and the Seal of the United States to be hereunto affixed.

GIVEN under my hand, at the City of Washington, this third day of April in the year of our Lord one thousand eight hundred and twenty eight, and of the independence of the United States of America the fifty second. J. Q. Adams

BY THE PRESIDENT.

H. Clay Secretary of State.

Washington, To WIT:

I DO HEREBY CERTIFY, That the foregoing Letters Patent were delivered to me on the third day of April in the year of our Lord one thousand eight hundred and twenty eight, to be examined; that I have examined the same, and find them conformable to law; and I do hereby return the same to the Secretary of State, within fifteen days from the date aforesaid, to wit; on this third day of April in the year aforesaid.

Attorney General of the United States.

Know all men by these Presents that George
W. Cartwright, of Mount Pleasant, County of Westchester
State of New York - Is entitled to one half part or moiety
of the within Patent - its rights, priviledges, covenants
and profits, therefrom or thereby arising or to arise.
To have and to Hold the same, to him his heirs
or assigns, for and during the full term therein
specified, In Witness whereof I have hereunto set
my hand and seal this 10th day of April 1828.

Elijah Brady



The Schedule referred to in these Letters Patent of
making part of the same, containing a description in the words of the
said Elijah Brady himself of his improvement in constructing
Bellows or Blowing Machines.

The said improvement consists in constructing an air
tight wooden case of any other material, or wood & other materials
cast iron excepted, of a prismoid shape at the sides; within which at-
tached to one of the square sides is placed a part corresponding to a
single bellows; the said bellows part being capable of filling the said
case when extended, which is effected by a short lever fixed on a
spindle, which spindle runs across the machine or case, being air tight
where it passes thro' to the outside, where a rocking handle or lever staff
is fixed to work the machine when intended for common work. — But
for a furnace blast, or anchor Smith, or such like blast, a crank
may be fixed to the spindle instead of the lever, & a rotary motion
may be applied by machinery, or a crank handle at one of the pro-
jecting ends of the spindle & a fly wheel at the other. —

Thro' that part or side of the case to which the bellows part is
attached & which forms the fixed side or front of the bellows a
suction valve or clock, must be cut, & also a discharge valve into
a trunk or pipe running to the reservoir; a suction valve must
also be cut thro' the opposite side of the case, & a discharge valve
to

to the reservoir which will be thro' the top when the reservoir is placed above; which is the most convenient position for it. Hence whenever the moving board of the bellows, which may be termed the centre board of the machine is extended air will be drawn in to it, while the air that was in the case will by the operation of the bellows filling the space, be driven into the reservoir. & vice versa the bellows part being drawn too, the case will fill as it discharges into the reservoir, by which means a constant current of wind is produced rendered equable, & of what intensity is desired, by the weight placed on the reservoir, with little or no friction; and by constructing the machine perpendicular the whole power is applied to the blast there being no resistance to overcome from the moving part; its centre being on the bottom & describing but a small segment of a circle at the top; its own specific gravity is so small it is not felt.

The said machine may be constructed as a double bellows within the case, when the sides might be omitted & only the front & back with the reservoir raised. Or the top of the case may be made a true segment to the centre board which may be made air tight by any ordinary means of stuffing, but either of the latter modes would have more friction than the first.

Witness

E. W. Vosie

R. H. Foster

Elijah Prady