The specification of this patent is not to be printed.

9047X

PATENTED AUG. 20, 1835.

H. HUNSICKER & J. KRAUSS.

BRICK PRESS.

Fig. 1.

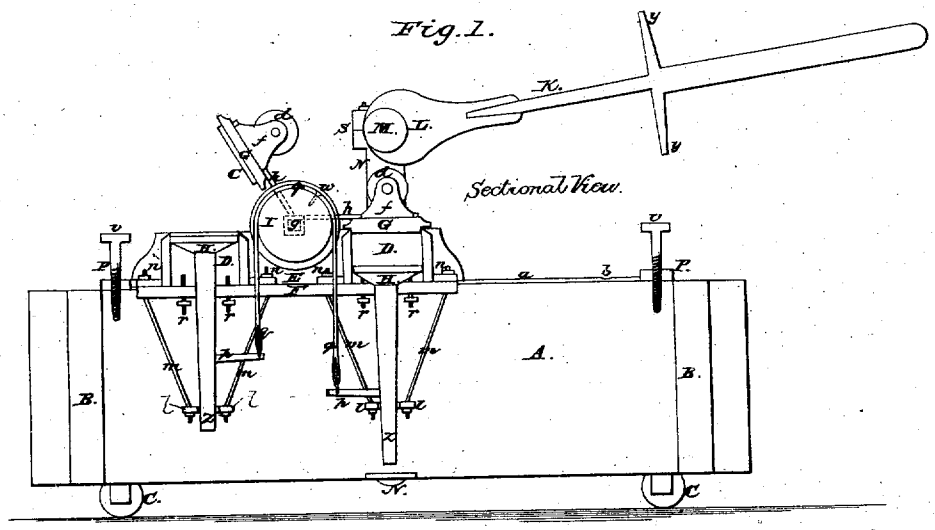
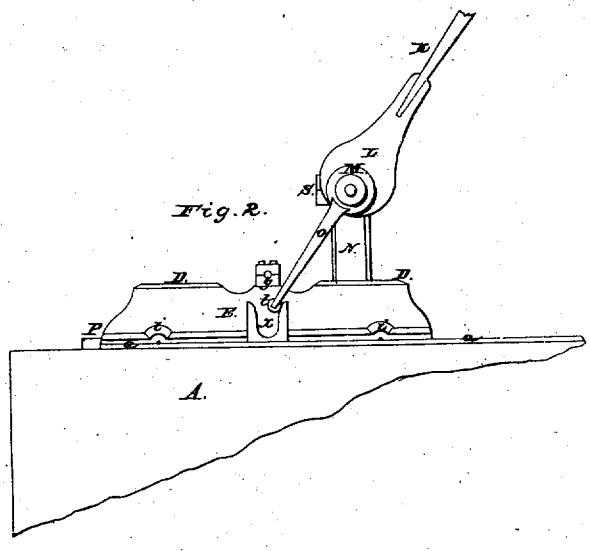


Fig. 2.



THE NORRIS PETERS CO., WASHINGTON, D. C.

Henry Hunsicker and Joel Krauss. of Northampton Borough, Penn.

Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Henry Hunsicker and Joel Krauss themselves of their improvement in a machine for pressing and finishing Bricks.

To all to whom these presents shall come. Be it known that We Henry Hunsicker and Joel Krauss. of the Borough of Northampton in the County of Lehigh and State of Pennsylvania have invented a new and useful machine for pressing and finishing Bricks and that the following is a full and exact description of the same as invented by us. In the annexed drawing fig 1 is a vertical longitudinal section of the machine through the centre A shows one of the side pieces of which there are two, about 4 feet long 18 inches broad and placed about 16 inches inside apart. they constitute the foundation of the machine. have cross ties at B.B. and are placed upon trucks wheels C.C. so as to render the machine portable. D.D are a pair of cast iron brick moulds, cast in one piece the side E which connects them together being cast with a projection or flange E' on the inner side that projects internally on the bottom edge of the moulds & externally from a shoulder that fits on the top of the two iron ways or bars U. secured on the tops of the side pieces on which the moulds are made to slide so as to bring them alternately under the operation of the pressing lever hereafter mentioned. for the purpose of diminishing the friction to stop the moulds at the proper points of the said. small friction Rollers i i are let into the bottom of the moulds on each side F which drop into the depressions or notches b.b. so that the moulds may rest solid on the rails while the brick is pressing. G.G. represent the covers of the moulds each having a follower C. that enters the mould a short distance. and on the top a friction roller d that bears on a strong pin or shaft e. passing through bearing f cast solid with the cover. which rollers which receive the pressure from the pressing lever. g is a centre shaft which bears in suitable boxes placed on the middle of the top edge of the connecting side of the moulds E. h.h are two fixed arms of which there are two to each mould cover. which proceed from said shaft making an angle of about 120° with each other and are secured to the tops of the covers by screws or rivets. the object of which arrangement is to cause either cover to rise when the opposite one is depressed by the lever. H.H. are the pistons. the feet I.I. of which pass through the guides

9047X

cured to the bottom of the moulds by brass Rods m. m. and screws and nuts n. n. by which they can be regulated. a rectangular strut or arm f. proceeds from each piston foot to which is connected a chain that passes over a fixed pulley I. on the centre shaft. the effect of which arrangement is that these pistons will rise or fall as their respective moulds are raised or depressed. the length of the chain g is such that the piston is not supported thereby whilst the bricks is pressing but bears with its underside on the adjusting screws r. r. passed each through the flange E a screw or pin w being inserted in the top of the pulley I to prevent the chain from slipping. K represents the pressing lever which is of wrought iron 3 or 4 feet long but may be of a length proportionable to the required pressure. it is attached to a double eccentric or cam L cast with a strong shaft M that bears in appropriate boxes S.S. secured to the tops of substantial iron uprights N. let into and screwed to the outsides of the side pieces and which for greater firmness are branched and screwed near the upper edges of said pieces. from one end of the shaft M descends as seen in fig 2nd a straight arm C with a friction roller U in the end of it that works in a notch X formed by 2 cogs cast solid on the outside of the connecting portion P2 of the moulds the office of which is to slide the moulds back and forth by the motions of the lever bringing them alternately under its pressure. To assist the pressure of the lever at the proper or useful point a cross bar P is screwed to the tops of the side pieces A at each end of the machine having a long screw w in the centre with a broad head which may be elevated or depressed. Two stops y.y. being attached to the lever the ends of which strike on the heads of the screws w and check the further descent of the lever.

Operation. The bricks being moulded and prepared for pressing in the common way the brick is placed in the piston of the open mould. the lever K is then drawn towards that mould and by the operation of the arm C the mould and brick is brought under the cam shaft M. by the progressive joint operation of the cam L and arm C, the covers of the mould containing the brick having been closed, and its piston depressed so as to bear on the screws r. r. whilst the cover of the opposite mould by the same operation has been raised and its piston elevated on the lever K being still further depressed the arm C disengages immediately from the notch X leaving the moulds at rest and the cam commences to press on the friction roller U of the cover and continue to operate more and more powerfully until the stop y strikes the head of the screw w. and the pressure is finished. a second brick is now placed in the opposite

mould and the cross K being carried over towards that side of the machine operates on it in a similar manner to that first described at the same time raising the dover and piston of the first mould and discharging the first brick which is to be replaced whilst the pressure of the second is completing and the operation is thus executed with greater economy of time and labour than in any machine hitherto used although we have described an arm O whereby to shift or slide the moulds we propose to effect the same thing by a semicircular cog wheel at the place where the arm O is working in a cogged slide at the outside of the moulds though we prefer the arm for its simplicity. but what we do claim in our machine as principles for which we ask Letters Patent is the plan of a double pressure & connected cross of the double moulds and the friction rollers which are let into the bottoms of the moulds, and the arms or cog wheels on the cam shaft by the simultaneous operation of all which through the motion of the pressing lever or cam shaft alone the bricks are pressed and discharged and the moulds brought under the pressure of the cross in regular alternation. We claim also the substantial iron uprights whereon the cam shaft rests on. In testimony that the foregoing is a true specification of our invention we have hereunto set our hands this 20 day of July 1835. The above machine is to be made to press the bricks edgeways as well as flat if required

Witnesses
Charles J. Massey
John J. Krauss.

Henry Hunsicker
Joel Krauss.

Exd.
HH

(Drawing)

3777 words